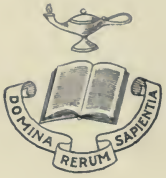

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Original Department.

Lecture.

HYSTERIA—APPLICATIONS OF STATIC ELECTRICITY IN ITS TREATMENT.

Delivered at the Salpetrière,

BY M. CHARCOT,

Professor in the Paris Faculty of Medicine.

Translated for the Medical and Surgical Reporter.

Gentlemen—I will confine myself in this, my last clinical lecture of this year (1881), to the consideration of a new subject, which is yet, as regards certain points, unsettled.

I refer to the applications made of static electricity in the treatment of diseases of the nervous system, particularly of hysteria. When hysteria is spoken of, or under discussion, there are many physicians yet, who, without any very evident reason, do not wish to listen, or take the subject into consideration, regarding the most conclusive arguments as without weight.

Some are willing to admit the existence of hysteria, but consider it a veritable protean malady; its evolution following laws so complex that it becomes impossible to submit them to analysis. Again, that the phenomena are so mobile, so changeable, that they cannot be reduced to any methodic description. These physicians would voluntarily ascribe to this affection almost all clinical phenomena which cannot be submitted to any recognized rule.

Other physicians, more radical, deny the existence of hysteria as a malady. They consider that all is but simulation and deception in the phenomena which characterize it. For them, a physician should be very careful how he meddles with such patients, or his professional dignity will be compromised. Thus, with a stroke of the pen, one good quarter of the nervous pathology of women is suppressed.

But I will demonstrate to you the reality of these phenomena, and though the tendency of hysterical patients to deceive cannot be denied, I will prove to you that hysteria is truly a separate malady, with greater mobility and with more variety in its manifestations than other maladies, but in which nothing happens through chance, everything occurring in conformity with certain rules, which may, notwithstanding the complexity of the phenomena, be determined by the observer if a certain method be employed.

This method is the following: proceed slowly and carefully in this domain, so difficult of access, and do not attempt to understand all immediately. Consider at first the more simple phenomena, those more easily understood, the most palpable in effect; some of these will be found analogous to symptoms observed in other maladies of the nervous system quite different from hysteria. But this is not all; the same observation must be many times repeated, with different subjects and under different conditions; the hospital observations must be placed in contrast with those seen in private practice. The more complex phenomena should be regarded with great circumspection, and those which seem to have no sensible connection with established pathological facts should not, for the moment, be taken into consideration.

I will first demonstrate practically certain methods by which the reality of the facts observed may be rendered manifest, although at first glance they may appear strange. This con-

cerns certain phenomena observed while the patients are in the hypnotized condition, into which state hysterical patients may be plunged with facility.

The different methods by which patients are (often with great facility) placed in the hypnotized state, are well known; by a monotonous and prolonged impression, such as that which results from steadily regarding an object with the eyes in convergence, or a sudden and startling impression, as that produced by the sudden beating of a gong or a flash of electric light. (See Bourneville et Regnard, "Iconographie Photographique de la Salpetrière," T. iii.)

If a patient is thus artificially put to sleep, two different conditions may be observed: if the eyes are closed, so as to prevent the impression of the light on the retina, the patient is plunged into the hypnotic state, which might also be called "sleep with muscular hyper-excitability."

In this state, in effect, it suffices to touch a muscle, to compress a nervous trunk, in order to produce contractions in the muscle or groups of muscles under the dependence of the nerve.

But, if the eyes are open, so that the retina may receive the impression of light, the patient falls into the cataleptic state. In this condition the muscles are soft and pliant, but are incapable of contraction under the influence of excitation.

But the two states may exist conjointly in the same patient; to bring this about one eye should be uncovered while the other remains closed. Under these conditions the muscles on the side corresponding to the open eye are hyper-excitable, while on the other side the series of phenomena which characterize the cataleptic state are observed.

This fact of muscular hyper-excitability is the most potent to confirm conviction in the minds of those physicians who consider that all which relates to hysteria is simulation.

And, in effect, if it be true that the motor nerves and the muscles are excited in the hypnotized patient by simply touching them, effects should be produced on any patient, though completely ignorant of anatomy and physiology, anlogous to those discovered by Duchenne, of Boulogne, in his remarkable researches on localized electrization.

If, on the contrary, the patient were not really hypnotized, but was able and desired to deceive, the simulation would very soon be recognized. The patient being completely ignorant of anatomy and physiology, the motion and contractions would be dictated by her caprice, and would not in the least be in conformity with known anatomical facts.

Or, such is not the case, if, as M. Charcot demonstrated in his lecture, the results of faradization of the different muscles and nerves be compared with those induced by simple excitation of the same muscles and nerves in the hypnotized hysterical patient; they will be found to be identical. And this fact is so well proven that the action of muscles and groups of muscles under the two methods of excitation have been reproduced by means of photography and the identity of the effects rendered still more evident.

This fact holds equally good for the muscles of the face, of the upper or of the lower limbs, in well marked cases: the results obtained by one and the other method are the same, and the hypnotized patient realizes, with a precision and exactitude which at first causes astonishment, the ensemble of movements commanded by the excited muscles. If, notwithstanding all these proofs, simulation should be thought of, it would be necessary to suppose the patient had a profound knowledge (much more extensive than that possessed by most physicians) of the anatomy and physiology of muscles, and a species of infallibility which would enable him, though taken completely by surprise, never to make a mistake regarding the action of a muscle or the anatomical distribution of a nerve; we have no necessity to establish the absurdity of such a hypothesis.

Before taking up the history of the effects of static electricity, we should consider the results obtained through means of the medicaments I have termed æsthesiogènes. This is a series of therapeutic agents by means of which, as the expression indicates, sensibility or common sensation may be brought back to parts whence it has disappeared, in hysterical patients particularly, but also in persons with cerebral lesions.

To M. Burq, is incontestably due the merit of having opened the way to this order of researches, in demonstrating certain properties of metallic plates. But since the works of Burq, and, particularly, through researches made at the Salpetrière, this subject has been enriched by many additional facts.

Among æsthesiogenetic agents, the magnet occupies an important place between the metals and static electricity. The action of the magnet is well known to day, and has been popularized through the works from the Salpetrière (Charcot, Regnard, Vigoroux). The objections urged against the effects obtained by the magnet are of

two orders: first, it has been advanced, and without any proof, that the observers, under the influence of an illusion, were deceived by the patients. But soon the observations became numerous, and were verified by many scientists; the magnet was shown to be efficacious, not only against the hemianæsthesia of hysterical patients, but also against certain forms of hemianæsthesia due to organic lesion, or against those of toxic origin.

It was then that the idea of "expectant attention" was invoked to explain the phenomena which they persisted in not attributing to the magnet. Attention, being, they say, fixed with force, and without intermission, on one part of the body, either the circulation or the innervation of this part of the body, or both at once, become affected. Naturally these effects are much more marked if there is hope of any determined result being obtained. Or, they say, it is through this strong tension of the mind, to the "expectant attention," in a word, that the return of sensation into the part experimented on is to be attributed.

This new objection has been often replied to, and shown to offer no more resistance to serious examination than the preceding one. As proof, I will cite the following experiments, chosen from among many others:—

1st. A false magnet, resembling exactly, as regards form, volume and weight, the true magnets usually employed, will have no effect if placed to the affected side; sensibility will not reappear. Nevertheless, in this case, does not the pretended "expectant attention" exist, just as when recourse is had to a veritable magnet?

2d. Zamboni's electric pile brings back frequently, like the magnet, sensibility to the part whence it has disappeared; while with a false pile, exactly resembling the other exteriorly, no result is obtained.

3d. Finally, if a solenoid is made use of, through which the current obtained from the pile may be passed or interrupted without the knowledge of the patient, it will be found that the anæsthesia disappears when the solenoid is traversed by the current, while there is no change when it is not placed in relation with the pile.

All these facts and experiments, repeated hundreds of times, by numerous observers, on many diverse patients, form a peremptory refutation to oppose to those physicians who still obstinately deny the evidence.

We will now proceed to consider the subject which is principally the object of this lecture—the effects of static electricity. It will be useful to determine with precision the characters of static electricity, and to demonstrate in what it differs from the two other modes of electricity, the faradic and galvanic. Electricity is always one and the same, whatever the generator which produces it; it presents itself with two essential attributes: 1st, quantity; 2d, tension. But according to the generating apparatus put in use, sometimes the quantity predominates, sometimes the tension. At this point of view the different forms of apparatus for generating electricity may be considered in three groups: 1st, the apparatus which furnish electricity in a high state of tension, but in feeble quantity; the ordinary electric machine is the type of this form of apparatus which furnish static electricity; 2d the apparatus which produce electricity of feeble tension but in large quantity, such as the pile; 3d, finally, the electro-magnetic or induction apparatus (faradic apparatus) which constitute a link of transition between both, for the tension and quantity are both relatively considerable.

Electricity furnished by the pile produces very different effects from that of the machine. (*a*) The gold leaves of the electroscope diverge widely at the approach of a machine producing static electricity, and rest in contact with each other when the current obtained from the pile is passed through the apparatus. (*b*) Water, on the contrary, is decomposed by the galvanic current, while electricity of tension has no effect on it. (*c*) Iron wire becomes incandescent when traversed by a continuous current of sufficient power, while static electricity has no effect. (*d*) Finally, the static machine gives rise to sparks, which the pile does not produce.

This divergency in the physical effects of the different modes of electricity would lead to the supposition that there existed corresponding differences in the physiological and therapeutic effects.

It is known, for instance, as regards physiological action, that a faradic current does not act on a muscle at a certain moment after the section of the nerve, while under these conditions the action of the galvanic current is more energetic than in the normal state.

On the other hand, the application to the tongue of one of the electrodes of the pile gives rise to a metallic taste, which is not produced by the electric spark. Thus, at a physical and physiological point of view, each mode of electricity has effects proper to itself; and the same is true as concerns therapeutic effects.

Therapeutically, in effect, static electricity has

its separate place beside faradic and galvanic electricity, just as it has its special characters and effects, physically and physiologically.

Static electricity has latterly attracted little attention as a therapeutic agent, since the experiences undertaken by Manduyt in 1875. Duchenne, Remak, Benedikt, and Onimus, attached little importance to this form of electricity, which M. Vigoroux has recently sought to introduce into practice.

The machines formerly used, that of Ramsden notably, have too feeble a tension, and are with difficulty kept in order; while the tension in the machine of Holtz is too strong; the machine recently brought forward by Carré, particularly with the modifications made by Vigoroux, presents an incontestable superiority over the preceding ones.

This machine is enclosed under a glass receiver, which permits, with the aid of certain substances having great affinity for moisture, chloride of calcium, for instance, the maintenance of the machine in a sufficiently dry atmosphere, so that it may be put in use at any moment; when a motor like that of Bishop is added to the machine it may be put in action without the assistance of an aid, and can be used for several hours in succession.

Finally, M. Vigoroux, making use of several isolated stools placed in relation with the machine, has been able to place five or six patients at a time under the electric influence.

Through the means of this perfected apparatus, daily in use at the Salpetrière, static electricity, heretofore of difficult application, has been reduced to practical use. The patients, placed on the isolated stool and in relation with the machine, are plunged, as it were, into a veritable electric bath, or rather, to be more exact, an electro-static bath. They are placed on the course of an electric conductor, and representing simply a prolongation of one of the poles of the machine, they must be influenced by the electric state of the conductor. The other pole is pro longed to the earth, and the two prolongations are separated by the layer of air interposed between the ground and the stool.

In this species of electric bath the electricity is not in repose; there is constant destruction and renewal. as attested by a Lane's electrometer placed near the stool. The electric fluid escapes from all points of the surface of the patient, particularly from the hair, the ends of the fingers, etc. From this results a feeling of irritation all over the cutaneous surface. And again certain important physiological effects are remarked; the cutaneous perspiration is augmented, the digestion rendered more active, the station on the electric stool communicating frequently a decided sensation of hunger.

With the aid of excitators (excitateurs) the discharge which takes place slowly and continuously from the patient's body may be localized. The excitators most commonly put in use are rods of wood or metal, provided with isolating handles and in communication with the ground by means of a chain. These instruments are pointed or terminate in a bulb, according to the effects it is desired to produce. Special forms, even, have been constructed for the electrization of the eye, the ear, the muscles.

If the excitator is placed at a distance of fifteen or twenty centimeters from the cutaneous surface, the patient has the sensation of a current of fresh or heated air; it is what might be termed the electric wind.

At a distance of six or eight centimeters the sensation is more acute, and has a character of irritation; there is a pricking sensation at the part. At the same time, from the extremity of the excitator there proceeds a bunch of luminous rays which spreads as it reaches the body (c'est l'aigrette). Finally, if the excitator, preferably with the bulb termination, is brought still nearer the cutaneous surface, the electric spark is obtained and provokes, at the moment it is disengaged, a sudden movement of the limb, with a painful sensation at the point nearest the bulb. Operating over the naked surface, a brusque contraction is often observed in the muscle, directly under the point where the spark was emitted.

Localized muscular electrization may be thus effected, and in certain cases of paralysis of spinal origin certain muscles which did not react under the influence of faradic electricity contracted under the electric spark.

It may be seen, from what we have observed, that through means of this machine the patient may be simply placed in a sort of electric bath, or may be brought, by using excitators, under the influence of the electric spark, etc.

The first patient I will present has a hysterical contracture of the left forearm, with flexion of the fingers of the hand and of the forearm. This patient was formerly cured, when similarly affected, by applications of the magnet, but after two years the contracture reappeared, and is much more tenacious than formerly.

Placing the patient on one of the isolating stools, by means of the electric wind (that is through the near approach of an excitator),

artificial contracture is soon brought about in the right arm. There is no actual transfer of the contracture from left to right, as happened formerly, when the magnet was applied; there is simply a slight relaxation of the muscles of the contracted left arm, while the contracture is produced in the right arm. Although the effects obtained up to the present in this case are not very conclusive, there is every reason to believe that in the end an artificial state of contracture will be brought about in the right arm, and the spontaneous contracture in the left cured, as it was two years since, by the magnet.

I present to you, also, three hysteric subjects; in two there is hemianæsthesia, in the third complete anæsthesia.

When these patients are placed in what we have termed the electric bath, little by little the following effects are produced: if anæsthesia is complete or total, after a few minutes the anæsthesia becomes more marked on the side where it habitually predominates (it is well known that even where there is anæsthesia of both sides, it predominates always on one side); sensibility reappears, on the contrary, on the side where anæsthesia is usually least marked; then, after a few instants, anæsthesia changes from one side to the other (transfert), and, finally, after twenty, twenty five, thirty minutes, sensation has returned over the whole body, special sense as well as common sensation. If there existed, primarily, hemianæsthesia, there is, as in the other case, transfer and finally complete return of sensibility.

A hysterical patient who has thus recovered sensibility retains it for several hours and even several days; for that matter, by repeating each day the seances of electrization, things may be maintained in this state.

It is not without utility to thus induce a return of sensibility in a hysteric patient, for experience has demonstrated that these patients are in reality, for the moment, cured, while they are no longer in a state of anæsthesia; for instance, they can no longer be placed in the hypnotic condition, and often the excitation of certain parts which usually in them bring on the hysteric attack no longer produce that effect.

These facts would suffice to render legitimate the efforts to restore static electricity to a place in therapeutics.

And it is not in hysteria alone that static electricity has given results.

Certain cases of facial paralysis, of peripheric origin, have been cured by this process, which would appear destined to render real service in cases of paralysis difficult to treat by electrization and galvanization, on account of the imminence of contracture. In shaking palsy (paralysie agitante), interesting effects have been obtained. The shaking is immediately arrested in those parts of the body on which the electric spark is directed, and although there can be no hope of actual cure, the malady has, in several cases, been happily influenced by this practice.

Certain nervous troubles, spinal irritations, dyspepsias and dysmenorrhœas of nervous origin, which had proven rebellious to various modes of treatment, have been also ameliorated by the aid of static electricity.

It can, then, be seen that this is a therapeutic agent of great value, and although there are many researches yet to be made regarding it, it is evident that it merits being withdrawn from the obscurity to which it appears to have been systematically relegated.

Communications.

FOUR CASES OF TUBERCULAR MENINGITIS.

BY CHARLES K. MILLS, M.D., AND LAMBERT OTT, M.D.

Read before the Northern Medical Association of Philadelphia.

The cases here reported occurred in the practice of Drs. M. Franklin and L. Ott, and were seen by Dr. Mills in consultation. The autopsies were made conjointly by Drs. Franklin, Ott and Mills, and the microscopical examinations by Dr. L. B. Hall.

Case 1.—G., female, five years of age, had a good family history, her parents being quite healthy, and her grandparents having reached a good old age; no consumption had ever been known in the family. The child had never been as bright and active as other children of her age; she seemed to like solitude. For two weeks she had been peevish and fretful; not playing, refusing to eat, and appearing unconcerned when addressed. Her parents noticed a tendency to unnatural drowsiness. She was brought to Dr. Franklin's office, and while there went to sleep, at the same time vomiting. On the way home, however, she walked as well as a healthy child. The next day she was seen at home; she did not stir when approached, but opened her eyes, stared and relapsed into a drowsy state. Her pulse was 96, irregular and soft; temperature 98.1°. Respirations were 27, and presented striking irregularities, the *irregularities* occurring in

nearly *regular* order. Two to four sighs took place in the course of a minute. A very long sigh would be drawn, followed by a cessation of respiration, lasting usually from ten to fifteen seconds, sometimes being shorter. Short and rapid breathing then occurred, increasing in length with each inspiration until it reached about a normal rate, continuing at this for three or four respirations, when there would be another sigh, and then another pause. This would be again followed by scarcely perceptible breathing, but gradually increasing as before. This peculiar "ascending" respiration did not follow every sigh. Supposing that four sighs occurred in the minute, two or three would be followed by the hiatus and gradually increasing respiration, while the other one or two, much shorter, would be followed by ordinary respiration. Lifting the child, pricking her with a pin, or otherwise irritating her, would disturb the peculiar irregular rhythm of the respiration. When touched or moved she cried out vehemently, at the same time manifesting great irritability, but as soon as the disturbance ceased she immediately fell asleep. When irritated her face became intensely flushed. *Tache cerebrale* was well marked, the red streak coming slowly when the finger was drawn over the surface, and then gradually fading. The pupils were dilated, responding feebly to light. The skin was dry and scaly, the extremities were cold. The urine was passed in bed; the bowels were constipated. The belly was not retracted. She was considerably emaciated. Physical examination of the lungs showed dullness over the left apex, with harsh respiration. On the day on which these notes were made, about the fourteenth since anything wrong had been observed, she had a slight spasm.

15th day. Her pulse was 96, rectal temperature 97°, respirations 20. At every fifth or seventh respiration was a sigh. The pupils were unequally dilated. She was continually drowsy, half awaking now and then, and staring vacantly. She threw off all covering day and night, seeming to wish to be naked. The abdomen was beginning to be retracted. Her bowels were opened, the passage being hard. The extremities were warmer than on the previous day. She was given a piece of solid food, a favorite dish, which she bit eagerly and chewed a few seconds, and then fell off to sleep with the bolus in her mouth. She was much more irritable than on the previous days. When both thighs were seized and the femur squeezed, she would give a piercing scream. This was a striking peculiarity. Compressing other parts of the extremities did not elicit any cry.

On the 16th day her condition was very much the same as on the previous day; pulse 84, temperature 98.6° respirations 24. On auscultating the chest a peculiar alteration in the normal condition of the respiratory sounds was observed. Sometimes for three or four respirations the inspiratory sound would be prolonged much beyond the expiratory, and this was followed alternately by a prolonged expiratory sound. The end of the stethoscope left a white ring with a red centre, and shortly after removing it, the entire ring would become red. The face had a permanent flush, which was aggravated when the child was disturbed. The abdomen was much retracted.

On the 17th day the pulse was 124, temperature 99.2°, respirations 20. The inspiratory sound was much prolonged. She could not stand unsupported. The nose and left cheek showed a bright flush; the left side and extremity were deeply flushed.

18th day. Pulse 120, temperature 99.5, respirations 24. Her condition about the same, only the skin was quite dry.

19th day. Pulse 118, temperature 97.2°, respirations 24. She had an involuntary passage from the bowels, in bed. The muscles of the back and neck were stiff, with a little inclination to opisthotonos. The knee joint was very stiff; other joints were normal. The eyelids twitched convulsively. She was still very stupid, lying quiet, with an expressionless countenance, but showing great irritability, with an instantaneous flush of the face, when disturbed. Her cough continued to increase. When the femurs were compressed she quickly thrust out her hand to resent the annoyance, crying, as if in pain. The same handling of other parts of the extremities gave apparently no pain.

No notes were made on the 20th day.

21st day. Pulse 128, temperature 99°, respirations 24. The abdomen was much retracted. When a rapid motion was made toward the open eyes she rapidly closed them, as if in dread of a blow.

22d day. Pulse 134, temperature 99°, respirations 40. The respirations still showed the irregularities already described.

23d day. Pulse 120, temperature 97.5°, respirations 16. She snored considerably. While watching her, the face suddenly became intensely flushed, without any external disturbance. She had ptosis of the left upper lid, and partial closure of the right upper lid during sleep. Loss of

power in the right arm and leg became manifest. Sensation seemed in no way altered. Examination of the urine showed that neither albumen nor sugar were present.

24th day. Pulse 128, temperature 98°, respirations 24.

25th day. Pulse 125, temperature 98°, respirations 28. A swollen, tympanitic belly was taking the place of the retracted abdomen.

26th day. Pulse 144, temperature 99.7°, respirations 40.

27th day. Pulse 160, temperature 98.8°, respirations 20. She threw her head back with every inspiration, at the same time opening her mouth as if unable to obtain sufficient breath. Every few minutes the face would suddenly become flushed and would so remain for about three minutes.

On the 28th day she died, while trying to take a little milk, which she was unable to swallow.

Autopsy.—The central base from optic chiasm to medulla oblongata, showed advanced purulent exudation, involving the optic nerves and tracks, and the third and fourth nerves. The latter nerves, particularly on the left side, were bound down. Tubercles were found along the vessels far out in the Sylvian fissures. A few miliary tubercles were found in the velum interpositum. A large amount of fluid was found in the ventricles.

Case 2.—Male infant, ten months old. The father had died of lung disease of a few months' duration. The babe had thrived well on artificial nourishment until three weeks before he came under medical care, when he was taken with vomiting and purging, passing blood and mucus; this lasted two days, and he was afterward cross and peevish. When first examined he had slight cough, was irritable, continually moaning, not satisfied in any position. He had great thirst. His bowels were opened twice daily. Saliva dribbled from his mouth. His physiognomy presented a peculiarity, as follows: the longitudinal and transverse wrinkles of the face successively appeared and disappeared, the eyelids opening and closing, at the same time throwing his head back every few moments, as if in a fit of anger. The temperature was 102°. His condition remained nearly the same for about a week. About two and a half weeks from the beginning of the illness he fell into a stupor, only awaking to take a little milk when placed in his mouth, and then showing great irritability.

On the nineteenth day his pulse was 140, temperature 102°, respirations 40. His skin was very dry. He moaned a great deal during sleep, and when disturbed manifested extreme irritability.

On the twentieth day he was still sleeping, and when awakened stared with a frightened expression. He was usually quite pale, but sometimes a flush would suddenly appear. His abdomen was beginning to be a little retracted. Several times during the day he perspired considerably. His bowels were opened three times. Pulse was 120, temperature 102°, respirations varied from 10 to 20 per minute. On watching the breathing, and judging merely by sight, it was noticed that two short respirations occurred, then a sigh followed by a pause, or, at least, no perceptible movement, for from twenty to twenty-five seconds; after this came two rapid respirations. On pressing the hand deeply into the abdomen, however, during this apparent pause of twenty-five seconds, rapid and shallow breathing was discovered.

On the 21st day the pupils were sensitive to light. The bowels were opened once. The neck and back were quite rigid, inclining to opisthotonos. The retraction of the abdomen was increasing. Tache cerebrale was manifest.

22d day. Flushes occurred much oftener during the evening. He perspired profusely. He whined when much pressure was exerted on the thigh. Pulse 120, temperature 101.2°, respirations 56.

23d day. A peculiar odor was given off by the patient, like that of the perverted secretions of cutaneous glands. Washing did not cause the odor to disappear. The patient screamed suddenly at intervals, and had convulsive twitchings of the hands and feet, lasting for an hour. The eyelids also twitched at times. The pulse was fluttering and could not be counted. Temperature 103°; respirations 48.

24th day. For twenty minutes at a time he tossed his head from side to side, and then remained quiet for about the same period, when the movements recurred. He had now also rapid oscillations of the eye, with contracted pupils. Sensibility was abolished in the left arm and both lower extremities. Temperature 107°; respirations 64, regular and labored. He died on the evening of the 24th day.

Autopsy.—The anterior fontanelle was very little closed, considering the patient's age. The dura mater of the convexity was adherent to the skull. The tentorium, on its cerebellar aspect, showed some redness and exudation. The pia mater of the under surface of the temporo-sphenoidal lobes was hyperæmic. The pia mater covering

the orbital surfaces of the frontal lobes was somewhat opaque, and showed numerous miliary tubercles, more on the left than on the right side. The membrane covering the entire central portion of the base, from a point one-half inch in front of the optic chiasm backward to the pons, was milky white and thickened. The chiasm was bound down with exudation. The Sylvian fissures were glued together, exudations and deposits being found along the Sylvian vessels. Scattered tubercles were found over the pia mater of the convexity of both frontal lobes. The posterior horns of the ventricles were much dilated.

Microscopical Examination by Dr. Hall.—The membranes were thickened by an increase of fibrous tissue. There was an infiltration of rounded cells, chiefly along the vessels, forming a wedge-shaped ring on the small arterioles, where they dip into the cortex. On the vessels of the pia mater they formed oval-shaped masses not encroaching on the calibre of the tube. These, as well as the thickened membrane, took the stain more readily than the rest, showing their active condition.

Case 3.—M., male, aged two years and six months, had always enjoyed good general health, but had passed through a severe attack of summer complaint four months previous to coming under observation. His father died of consumption. Nine days before he was first seen professionally he was attacked with apparently causeless vomiting, with some diarrhœa, fever and general irritability. The next day the mother noticed that the child had a fixed and staring expression. He remained restless, irritable and out of sorts, but without any change of note in his condition for seven days, when one of us was called in to see him. His eyes were fixed and staring. It was impossible to attract his attention. Even screaming in his ears had no effect. His pulse was 180, temperature 101.4°, respirations 30. Respiration was irregular and peculiar; five to six regular breathings would be succeeded by a sigh, and this would be followed by a pause of fifteen to twenty seconds. Faint respiratory movements could not be detected when the hand was pressed deeply into the abdomen. After the pause, a few rapid, short respirations—but each increasing in length—were taken, until easy, regular breathing was reached. This would be followed again by sigh, pause, and ascending respiration. The left pupil was dilated. He had a cough, apparently due to bronchial catarrh. The abdomen was a little flaccid and somewhat retracted.

We will not give the record of daily observations in this case, the condition not changing much, and not differing markedly from that noted in other cases.

The following notes were made on the 20th day: pulse 160, soft and irregular; temperature 104.2°; respirations 68, labored and different from preceding days. He would have five rapid and lengthy inspirations, with an expiratory moan; then ten rapid, short and nearly imperceptible inspirations, not attended with the expiratory moan; these would again be followed by the lengthy inspirations and expiratory moan. The pupils were equal, the eyes staring, and lids still wide open. The nostrils were constantly dilating. Mucous râles were present in the chest, but percussion showed no dullness. The cheeks were flushed. Tache cerebrale was quite marked. He swallowed with difficulty. The skin was moist. The tongue was coated, white and dry. The bowels were constipated, urine passed in bed. Tightly grasping the thighs did not seem to cause pain. The extremities were in a state of tonic spasm, now and then alternating with clonic spasms. The patient died on the 21st day of the disease.

Autopsy.—The pia mater over both orbital regions was deeply congested. Thickening of the membrane and purulent exudation were present over wide-spread regions of the base of the brain. Beginning one-half inch in front of the optic commissure the exudation extended out along both Sylvian fissures—on the left as far as the ascending convolutions, on the right for a distance of about one inch; it was present over the anterior ends of both temporo sphenoidal lobes, and over the central portion of the base from the optic commissure to the pons. The olfactory, optic, and oculo-motor nerves were slightly bound down. Over the anterior arachnoid space the membrane was of a deep red, but less opaque than in the other regions described. The pia mater over the posterior part of the first frontal convolution of the right side was slightly opaque and thickened. The ventricles were filled with fluid.

Microscopical Examination by Dr. Hall.—Thickened membrane and infiltration of rounded cells along the vessels were found here also, the membrane and the masses formed taking the stain more readily than other parts.

Case 4.—J. H., male, aged 6 years. The family had a tubercular history, and one patient died of brain trouble.

For two weeks the boy had been vomiting before breakfast, and had been complaining of pain

in the abdominal region. He did not wish to go to school, and when compelled to do so by his parents, returned feeling quite sick. One morning Dr. Ott happened in the house, non-professionally, and saw him, lively and looking well. Shortly afterward the patient went out with his sled, and after being out twenty minutes his companions noticed that he had a peculiar stiff appearance. Calling to him and receiving no response, they took hold of him and found him quite rigid. He was carried home. He was quite insensible. He was placed in a warm bath and cold was applied to his head, but without effect.

One hour after the beginning of the seizure he presented the following condition: his eyes were staring, now and then slowly oscillating, the pupils were dilated, the lids were twitching. The muscles of the mouth also twitched constantly, and a stream of frothy saliva flowed from the left corner of the mouth. His breathing was very irregular, jerking, and occasionally sighing or catching; sometimes expiration was attended with a moan. He was very pale, his lips blue. His pulse was 160. The extremities were cold and uninvolved in the spasm. Chloroform controlled the convulsions for the time being, when the lids closed, the pupils contracted and the pulse fell to 140. In half an hour he again opened his eyes, the lids began twitching, the eyeballs suddenly oscillating, but now and then becoming fixed. Three minutes after these prodromic spasms the muscles of the face became involved in the twitching; a flow of saliva followed, and then came a general convulsion. Being unable to swallow, he was given an enema of potassium bromide and chloral, and chloroform was administered by inhalation. This treatment eventually subdued the spasms, and the patient relapsed into a comatose condition. The corneæ were insensible, the pupils contracted, and the pulse very weak. Three hours later another convulsion came on, beginning with oscillation of the eyes and twitchings of the lids, and being soon followed by a clonic spasm of the left arm and leg. A hypodermic injection of morphia quieted him in ten minutes. His breathing became stertorous, his face livid, bronchial and tracheal râles were present, his pulse was very weak and frequent, and he showed every sign of impending death. He was turned on his side, to rid his chest of mucus and ease his breathing. Stimulants, with potassium bromide and chloral, were ordered.

Remaining in this condition about six hours, his mother called to him, when he opened his eyes and seemed bewildered. He was given drinks, which he swallowed, the first time since the beginning of the attack. He spoke and appeared quite rational. His bowels were now opened by means of a hydragogue cathartic. From this time until morning, being about eight hours, he alternated between spells of dozing and awaking, but seeming always confused.

In the morning he was quite irritable. He protruded his tongue when ordered; it was covered with a white fur, was moist, and not bitten. Vomiting now set in. Temperature 101° F., pulse 144, soft and compressible, respirations 42, irregular, sometimes sighing, imperceptible at times, and then gradually lengthening and becoming stronger. The pupils were contracted and sensitive to light. On pricking his face and upper extremities, even to drawing of blood, he did not wince. Sensation in the lower extremities, however, was much better. The abdomen was very much retracted. Motion was good in all parts of the body, especially observed while throwing himself about on the bed. He articulated well. During the remainder of this day he was in a semi-stupor. In the evening he showed some improvement, sleeping more naturally, and requesting drinks. His pulse was 104, temperature 101° F., respirations 36 and quite irregular. He vomited occasionally. The pupils were contracted and acted sluggishly. He was ordered ice to the head and counter irritation to the back of the neck.

On the third day he was very restless, and had been so during the previous night. He had some cough. His abdomen was more retracted. His pulse was very frequent, temperature 100.4° F., respirations 36. He vomited and complained of headache. During the entire day he was drowsy. His skin was more sensitive. He lay with his eyes partially opened, staring vacantly. On looking directly into his face he neither moved nor closed his eyelids. The pupils were dilated and sensitive to light. In the evening the pulse was 144, soft and irregular, now and then bounding; temperature 101.7°, and respirations 32, regular but labored. His urine was found to be acid in reaction and contained neither albumen nor sugar.

On the morning of the fourth day the pulse was 150, feeble, temperature 100.4°, respirations 28. Bronchial râles were present, with considerable cough. He was indifferent to surroundings; when spoken to did not answer. In the evening, pulse was 150, temperature 102.2°, respirations 28. He passed his urine in bed. His skin was moist. The right pupil was dilated,

the left was about normal. The *tache cerebrale* was very distinct. His respirations were regular and labored for three or four minutes, then came a short but distinct pause, lasting from one-fourth to one half a minute and followed by coughing. With every inspiration his lids twitched. He was now much emaciated.

On the fifth day the staring was increased. When the eyes had been closed for some time and the lids were suddenly raised, a contraction and dilatation of the pupils, lasting thirty seconds, would occur. The pulse was 180; temperature 103 5°; respirations 40, very labored and abdominal; tongue dry and coated. The vomiting had ceased, the bowels were constipated. Flushes suddenly appeared, lasting a few minutes, and replaced by a pale, waxy appearance. *Tache cerebrale* was still quite marked. He swallowed with difficulty. In the afternoon his pulse became quite imperceptible, the temperature 101.5°, and breathing quite labored. Spasms occurred, involving first the left side of the face, and afterwards the right side, and then both upper extremities. They lasted half an hour, and in another half hour he was dead. For eight hours before death he did not voluntarily move his left arm.

Autopsy.—No opacity or exudation was anywhere discoverable, but the pia mater, both of the base and convexity, was streaked with red and more adherent than usual. The opacity, exudation, and thickening found in the central regions of the base in the other cases, were entirely absent in this case. A few miliary tubercles, or what appeared to be miliary tubercles, could be made out by the naked eye, in the pia mater of the anterior frontal portion of the convexity, particularly in the left hemisphere. The specimen examined microscopically by Dr. Hall was taken from this region. No hydrocephalus was present. Coagulated blood was found in some of the vessels of the base. The floor of the fourth ventricle, on each side of the median line, both above and below the auditory tracts, was deeply congested.

Microscopical Examination by Dr. Hall.—The membranes were thickened, and stained more deeply than normal. Here and there along the vessels was a pyriform swelling. No infiltration along the arterioles, where they dipped into the cortex, could be found. The same lesion seemed to be present here as in the other two cases, but in an earlier stage.

Remarks.—We shall give these cases without extended remarks. Most of the symptoms, physical and psychical, were those usually to be expected in cases of tubercular meningitis. The great pain produced on squeezing the femurs, in Case 1, was a peculiar manifestation, and one to which we do not remember ever having known attention to be called.

Cheyne-Stokes respiration was observed in three of these cases. Even in the fourth the breathing was peculiar. It will only be necessary to recall that in this form of respiration brief periods of apnœa recur at intervals. Prof. Wm. Pepper, in the Philadelphia *Medical Times* for May 27, 1876, published an article entitled *Remarks on Cheyne-Stokes Respiration, especially in Connection with Tubercular Meningitis.* He gives the notes of two cases, and reference is made to reports of cases by other authorities. We are certainly inclined, with Dr. Pepper, from our own experience in the four cases here reported, to attribute to Cheyne-Stokes respiration positive diagnostic value in tubercular meningitis.

In Case 1 the temperature ranged between 97° F. and 99.6° F.; in Case 2 from 101.2° to 107° just before death; in Case 3 from 101.4° to 104.2°, and in Case 4 from 101° to 103°. Observations on temperature in tubercular meningitis show, as is well known, great irregularities. One of the most recent investigations is that of Jules Turin (*Jahrbuch für Kinderheilkunde*, vol. xvi). Our observations in these cases agree with some of the conclusions of Turin, but differ from others. The first three conclusions of Turin are as follows; 1. Tubercular meningitis is always accompanied by a rise in temperature in one or other of its stages, but very seldom during its entire duration. 2. In a few cases only does the disease begin with a sudden rise of the bodily heat, as in some forms of acute disease. 3. The thermometric results are extraordinarily variable, so that it is quite impossible to establish any typical temperature curve. With these conclusions our observations are practically in accord. His fourth conclusion is that in uncomplicated cases of tubercular meningitis the temperature rarely exceeds 102.2° F., and generally varies between 100° and 102°, but it may sink some degrees below the normal. In the first of our cases the temperature remained a little below or a little above the normal all the time. In all of the other cases it reached a higher point than 102° before death, in Case 2 even reaching 107°.

Case 4 differed from the other three cases in several particulars. A cataleptoid condition and severe spasms ushered in the attack, although he had vomited several times and com-

plained of pain in the abdomen. The patient died within a week after the occurrence of the first spasm. Vomiting, headache, elevated temperature, irregular respiration, but not of the Cheyne Stokes type, alterations in the pupils, *tache cerebrale*, were among the symptoms. Nystagmus was a symptom worthy of special note. The case was probably one in which miliary tubercles in small quantities were here and there in the entire pia, although only visible to the naked eye in the antero frontal regions of the convexity. The tubercular inflammation was apparently more intense at the convexity than at the base. It is not improbable that the nystagmus, and local and general convulsions, were due to direct irritation, by an inflammatory process, of the motor regions of the cerebral cortex. This case should teach us not to make the mistake of supposing that tubercular meningitis is not present because we do not have exudation and suppuration of either base or convexity. The minute tubercles may only be discovered at particular regions when the inner surface of the pia mater is very carefully examined. It may, indeed, be necessary to resort to the microscope to set any doubts at rest. Miliary tubercles may exist in large numbers without causing purulent inflammation of the pia anywhere.

COLCHICUM IN ACUTE RHEUMATISM.

A paper read before the Clinton County Iowa Medical Society,

BY P. J. FARNSWORTH, M.D.,

Of Clinton, Iowa.

In the early days of my practice I went out with the old doctor to see a patient, six or seven miles from home. We found a large, strong man, who had been taken rather suddenly, with a high fever, and severe pains in his joints, in his knees and ankles especially, which were also somewhat swollen, a thick coat on his tongue. The slightest move was agony to him, and a jar of the bed gave him pain. The doctor at once pronounced it a case of inflammatory rheumatism.

Opening the capacious medicine chest which the doctor of the old time carried, he first gave him some powders of calomel and jalap, five grains of the first to ten of the last; this was inevitable; such a tongue demanded it; then from the store of everything, from castor oil to cantharides, he drew out some solid extract of colchicum. The woman of the house produced a half-pint bottle, and the doctor guessed off half a drachm of the extract and put it into the bottle, with a little tincture of cinnamon. It was filled with water, and directions given to administer a tablespoonful every three hours, beginning one hour after one of the powders. Some Dover's powders (pulv. ipecac. c.) say of five grains each, were also left, to be given when the medicine operated. The limbs were ordered wrapped in cloths wrung out of hot water.

The next morning I was directed to make the patient a visit. The woman met me at the door, with concern in her face, and the inquiry in regard to taking the medicine in the bottle. The man said a tablespoonful every three hours, the woman insisted that it was three tablespoonfuls every hour. She being the nurse, and persistent about it, had had her own way, and had faithfully followed for some time her version of the directions. At the third hour nausea had ensued, but the medicine was continued; by the fourth, vomiting and purging commenced. A Dover's powder was given and the dose from the bottle omitted until the sixth hour, when the vomiting and purging was so severe that the woman became alarmed, and had given the cathartic powder that was left over, which not being retained, she had resorted to peppermint tea and spice bags over the stomach, for relief.

When I arrived the patient was almost in a state of collapse, nearly pulseless, with feeble respiration, and an overpowering nausea, covered with a profuse prespiration. His rheumatism was all gone, the pain and redness had disappeared from the joints, and nothing remained except the extreme prostration. Some broth was prepared for him, a little brandy given, a powder of calomel and morphia administered. Calomel—for at that time it was the regulation dose for irritable stomach or ingrowing toe nail; it would have been heterodoxy not to be thought of, to have omitted it.

The man rallied, and in a little time recovered. The after treatment was a bottle of bitters, made of a decoction of cimicifuga and gentian root, a pint, to which was added half a pint of whisky. Dose, a tablespoonful three times a day. Directions written on a half sheet of paper, and tied to the bottle.

Here was a new idea in regard to rheumatism; a direct refutation of all my teaching. "Gruel, warm covering and *six weeks*." "calomel and opium," "digitalis and alkalies," "corn sweets and calamus," and with all or any, four or six weeks. It made an impression on me, and it was not long before I had a case, a child of ten years, unmistakably affected. Wine of colchicum was the form chosen, given with care, in simple syrup, ℥ij every hour; an opiate was

first given, to mitigate the pain. Violent vomiting and purging came on at the fourth hour, and further medication had to be suspended; there was no alleviation of the disease, and the expectant method was followed for three or four weeks, until the disease ran its limit, or nature overcame it. The term "self-limited disease" has done much injury to the practice of medicine, and the expectant method has been fitly named, a "meditation on death." If medicine is of any value, it is in cutting short or modifying disease, and with so many articles of known power, to sit down and let nature wrestle with disease unaided, finds its best similitude in aboriginal surgery, that lets gangrene and inflammation amputate the injured arm in long months, while the knife of the surgeon could do it with much greater safety in a few minutes.

The next case called to was that of a delicate woman of thirty. Her limbs were swollen, the pain excruciating; it was a third or fourth attack. There was evidence of valvular disease of the heart. Here was a case to treat carefully yet promptly. ¼-grain doses of morphine were given, to mitigate the pains, repeated every hour until relieved. A prescription was ordered, consisting of vin. colchici rad., ♏x; tinct. opii, ♏x; tinct. cardam. comp., q. s. to make up a teaspoonful, which was the dose, to be administered every three hours. This was continued for three days, alternating with the morphia. There was no nausea or movement of the bowels. The pain was quieted and the heart kept steady; at the end of that time vomiting and purging came on together; there was severe prostration, requiring careful treatment for a few days, but the disease was conquered, and in a few days more the patient was discharged cured.

I have seen many cases since, and have tried all the various remedies used, but none with so much certainty or success as with colchicum. Combine it so that the stomach will retain it long enough for the system to become saturated with it. Give hypodermic injections of morphine to quiet the stomach and ease the pain, then add opiates and aromatics or alkalies, as the case may be. If it has time to permeate the blood it acts as an antidote to the *materies morbi* that constitutes the disease, then come the specific action, vomiting and purging, and the end of the disease. If this result comes too soon no cure is effected. Sometimes we cannot so guard or disguise it that it will not be promptly rejected, and we get no benefit from it. In such cases we resort to the salicylic acid, which sometimes gives prompt relief but with a tendency to relapse; at other times seems of little value. Then we try the alkaline treatment and patience. So far I have never failed with colchicum if it could be tolerated for two or three days. I have not hesitated to use it with children or feeble adults, or where there existed cardiac complications, and in those cases treated primarily, have seldom, if ever, had the disease affect the heart. I have also reason to think that in small doses it may act as a prophylactic in those cases that are liable to recur. In a case where lithic acid was deposited in large quantities by the urine, especially where the concretions were so large as to cause nephritic colic, it seemed to prevent the concretions, or to dissipate them. If acute rheumatism depends, as some think, on the accumulation of lithic acid, or its rapid formation, colchicum may serve to excite the system to expel it, and prevent its deposit. Vomiting and purging is not effectual if produced by other drugs, or even by colchicum, if it comes too soon.

I have in some instances used salicylic acid, or salicylate of soda, in from five to ten grain doses in the beginning of the case, in connection with the colchicum, which acted as a palliative; also chloroform liniments, warm applications and blisters, in severe cases, but only for immediate relief, while waiting for the saturation of the system with the drug, which effects the cure.

In looking over authorities, I find a diversity of opinion expressed, the older authors holding that it was a valuable remedy for rheumatism; the later ones that it is uncertain, severe, and of doubtful efficacy; all agreeing that it is a specific in gout. Bartholow says of it: "In medicinal doses it increases the mucus and glandular secretions of the stomach and intestines, and probably, also, of the liver and kidneys, and skin. In larger doses, it produces a feeling of epigastric heat, nausea and vomiting, depression of the circulation, muscular feebleness, headache. It frequently purges, producing copious watery stools, and is usually held to promote the discharge of biliary matter. It increases the flow of the urine, of the solid constituents (urea, uric acid, etc.), as well as the water."

Dr. Austin Flint says, of rheumatism: "The majority of pathologists have adopted the supposition of Prout, that the morbid principle is lactic acid, and it is generally accepted as a rational base of treatment."

Fuller, in his elaborate work on the disease, claims for the alkaline treatment the arrest of the lactic acid formation and its elimination, and thus a speedy cure for the complaint. He con-

siders the patient safe from cardiac complication when the urine becomes alkaline, and remains safe so long as this condition of the urine is maintained.

Flint says that, "Rationally, according to this view, what is most to be desired in the treatment is the arrest of the production of the *materies morbi* contained in the blood." I am of the opinion that the slow and cautious saturation of the system with colchicum does this, and that the vomiting and purging eliminates the urates already generated. I have resorted to the alkaline treatment with some success in those cases where the colchicum was too promptly rejected to be of any service, and latterly to the salicylic acid, but only where colchicum failed.

Quinine is a necessary adjuvant in malarial regions, but is of no avail alone; so also iodide of potassium is of advantage where there may be a syphilitic taint. This for acute rheumatism. The remedies and treatment of the chronic form is to be considered at another meeting.

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

SERVICE OF WM. GOODELL, M.D.,
Prof. of Clinical Gynæcology.

Reported by GUY HINSDALE, M.D.

Case 1.—Result of an Operation for Uterine Cancer.

This is a case that I bring before you because I wish to show the result of an operation done two years ago, for the removal of a new growth, a carcinoma of the womb—in other words, an epithelial cancer of the cervix. It required the use of the fingers, the curette, the actual cautery, and nitrate of silver, to effect its removal. There has been no return of the disease, the cervix is smooth and covered with mucous membrane, and the patient is much better and has gained flesh. If five or six years is a criterion, I have so far cured three other cases of this disease.

Our patient now complains of pain at her monthlies, and for a very good reason. After scraping the tissues they were compelled to heal by granulation, which means cicatricial contraction, consequently, she has dysmenorrhœa, owing to this contraction of the cervical canal. But this trouble is slight compared with the grave disease from which she has been, thus far, relieved. We can feel no longer any vaginal cervix here; the operation has removed it, and has also narrowed the mouth of the womb, so that I cannot introduce the sound.

The Romans had a very good motto, and I think we will follow it in this case: *Quieta non movere.* There has been malignant disease here, and I do not venture to make any wound that could allow the disease to spring up afresh. The dysmenorrhœa is slight, and the cervix ought not to contract any more. So I shall let the woman alone and await developments.

Case 2.—Extra-Uterine Fœtation.

Here is a puzzler. This case was sent into the hospital as suffering from pelvic abscess. Her history is that she has been ill since the fourteenth of February, thirteen weeks ago, and that she saw her monthlies for the last time on December 25th. She says that in February she was "taken with a severe cramp in the stomach, with a stoppage of water"; that her abdomen increased in size and that for three or four weeks she was confined to her bed. The swelling seems to have made its appearance three or four weeks after the attack of cramp, and ever since that time she has had a faint pinkish discharge from her womb. The cramps returned, but they were not so severe; the patient has become very weak and the tumor is now increasing very slowly, if at all; she has lost flesh and has no appetite. She was perfectly well before Christmas, and has had five children, the youngest nine years ago.

There is a tumor here. What is it? Is it pelvic abscess? There are some things about it that lead me to say that it is, and that it is not. There is a possibility that she is pregnant; she is forty-one years of age; married, and lives with her husband. Placing my hand on the abdomen I feel an irregular outline, as of the doubled-up body of a child. The surface of the womb is very soft, but the tumor is outside of it. I introduce a sound, and it passes in three inches plus. The womb is fixed, as it would be in pelvic abscess or in extra-uterine fœtation. Against the theory of abscess is the fact that she has no night-sweats, and that she sleeps well.

The tumor is not adherent to the walls of the abdomen. Placing my ear upon it, I might expect, at five months' pregnancy, to hear the fœtal heart, but I can hear nothing. Our resident, Dr. Hughes, thought he felt a fœtal movement. There is a certain elasticity about it. In extra-uterine fœtation there is a solid body in a little fluid. I think that here we can get an obscure sense of fluctuation.

If it is an abscess its contents must be let out; if it is an extra-uterine fœtation, we must follow the same course.

What conditions, now, would explain the history of this case?

It is possible that an ovum was arrested at the fimbriated extremity of the oviduct—the morsus diaboli, as it is sometimes called. Having lodged within the tube, the walls are gradually distended, and in six or eight weeks they burst. This termination is often fatal, for the hemorrhage is liable to be profuse.

Pregnancy may be tubal or ovarian, or tubo-ovarian, or we may have ventral fœtation.

On the 25th of December our patient ought to have seen her monthlies, but she did not see them. Six weeks later, in February, the ovum, having been arrested at the morsus diaboli, ruptured, and she was taken with the severe pain already described. She became very weak, and supposing that our diagnosis is correct, it became a case of ventral fœtation, the ovum escaping from the oviduct, and fortunately without a fatal hemorrhage. The placenta remained behind in the tube, and it keeps life in the fœtus. A capsule of adventitious membrane and adherent intestines was then formed around

the fœtus, making the sac in which it lies, just as occurs in a circumscribed peritonitis in Douglas's pouch, the intestines being bound together by the encapsulating lymph. Pain became then a prominent symptom, and she had the signs of pelvic peritonitis. In this manner the uterus became fixed.

It is my belief, therefore, that we are dealing with a case of extra-uterine fœtation, and I shall appoint the operation for next week, and shall choose, by lot, ten gentlemen of the class to be present.

Note.—On May 26 Dr. Goodell put the woman under ether, and then the placental bruit and fœtal heart sounds were readily heard.

The abdominal incision was made under the spray, and a living fœtus extracted, but it died almost immediately. The sac in which it was confined was very thin, and lay to the right of the womb, on the right side of the woman. The fœtation was probably a ventral one, but this was not accurately determined. The placenta was not touched, for fear of hemorrhage. The woman was very weak at the time of the operation, and died on the seventh day, from septicæmia induced by the breaking down of the placenta.

Medical Societies.

NORTHERN MEDICAL SOCIETY OF PHILADELPHIA.

Drs. L. Ott and Chas. K. Mills read a paper upon Tubercular Meningitis. (See page 5.)

Dr. J. B. Walker thought the reports of the cases very important, because of the completeness of the records. He had seen several cases and four or five autopsies after this disease. The first lesions he had seen were in the pia mater, where it covers the Sylvian fissure; he had never seen a case where there was purulent infiltration. The earliest symptoms he had been able to recognize were constipation with vomiting without apparent cause. The next of value was the irregularity of the pulse. The "*Tache cerebrale*" he thought was of no value whatever. In listening to histories of Dr. Ott's cases, he was struck with the great similarity they bore to the irritation from teething.

Dr. J. T. Eskridge had seen several cases. He thought the temperature sheet an interesting feature of these cases. There is no regular course of development, as in typhoid, for example, neither can the irregularity be explained by the amount of irritation at the time. He thought the explanation has to be sought in the amount of blood poisoning, as is the case in tuberculosis of the lungs and in pyæmia. In explanation of the peculiar breathing he would endorse the remarks of Dr. Mills. He had never been deceived in a case of teething, to mistake it for tuberculosis. In teething the temperature is normal and the pupils are usually dilated, both of which symptoms are the reverse in tubercular meningitis.

Dr. Hall had seen several such cases. The account given in the standard works, of this disease, leaves the impression that it is exceedingly rare. During the first two years of dispensary practice he saw seven cases in which the symptoms agreed with those given by Dr. Ott. One of these was remarkable, in the fact that after passing into what was supposed to be the second stage, instead of having the symptoms of the third stage, ending in death and the autopsy, the child passed from the second stage to convalescence and recovery. The case was seen by other physicians, among whom our recording secretary, who agreed in the diagnosis. He reported the case to the Society once before, and recalled it in this connection as teaching one of two lessons, viz., these symptoms are not pathognomonic of the disease, or it is not necessarily fatal, as we usually suppose.

Editorial Department.

Periscope.

Carbolic Acid in Cancer.

The Atlanta *Medical and Surgical Journal*, for June, 1881, contains an article by its able editor, Dr. J. G. Westmoreland, on the above subject, in which he says:—

In a former article the partial history of two cases of supposed malignant uterine disease was given, in which the acid was used. One was beyond all question cancerous ulceration, while the other exhibited the usual evidences of malignant cauliflower excrescence of the os. These were treated almost exclusively with carbolic acid, applied locally. The former improved rapidly in every respect until the case passed from under my care, and gave flattering hopes of permanent recovery, while the latter was perfectly relieved, and has had no return of the disease.

Recently, a case of epithelioma came under my care, in which a malignant ulcerous tumor existed on the face, involving the eyelids, cheek and side of the nose, to the extent of four or five inches. The whole tumor was removed by the knife, and the eyeball extirpated.

Only a few days were required for the sprouting of malignant, fungous, hemorrhagic granulations over the whole raw surface. The cut edge of the skin, which appeared free from disease at the time of operating, seemed particularly prolific of these unhealthy granulations, rising rapidly above the surface of the face. The application of pure crystallized carbolic acid, warmed to the liquid state, was commenced about the sixth day after the operation, and was continued daily, with the effect of leveling down the exuberant growth and destroying the red hemorrhagic appearance. In less than a week from the time of commencing the application the granulations

were healthy, and the formation of new healthy skin proceeded from every direction around the large raw surface, except the upper portion of the nose, where a malignant tumefaction had all the time existed, extending across to a point near the inner canthus of the right eye. The application was made with a camel's hair brush, and to the fullest extent possible, without having the acid to ooze upon the sound skin: this being protected by a dry folded cloth kept near the raw surface, so as to absorb that which drained from the part to which it was applied. At the expiration of six weeks the raw surface was reduced to one-third of the original size, and that which remained unhealed was in the direction of the unhealthy tumefaction on the nose. No healing or formation of new skin had occurred for half an inch in extent at this point. It was not found necessary, however, to apply the acid to all parts every day. At points where the surface kept smooth and pale it was not required more than two or three times a week, while the point referred to on the nose received daily applications, in order to arrest exuberant growth and malignant tendency.

No pain at all is produced by contact of the acid with the diseased surface, but the lancinating pain which sometimes attends the disease is generally relieved by it. The amount of acid necessary may be determined by the visible effect had upon the part. The surface should be made completely white, and short of this we need not expect the full effect of the remedy.

In this case the diseased condition across the upper portion of the nose, and perhaps, in the left nostril, may interfere with a perfect arrest of the disease, owing to the impossibility of applying directly to these parts. By vigilance, and following up the prolongations, however, it is not unreasonable to expect a permanent cure, notwithstanding the vast extent and long standing of the affection before the treatment was commenced.

Jaborandi and Belladonna in Opium Poisoning.

Dr. F. L. Hardeen, of Rochester, N. Y., writes, in the *Michigan Medical News*, May 25, 1881:—

On Sunday, May 1st, I was called up at 1 A.M., and on going to the door found a lad with an empty bottle, who desired to know if I could tell what it had contained, and if it was poisonous. If it was I was to go immediately to Mr. M's, etc., etc.

On examination I found it to be laudanum, a few drops still remaining. I hastened to the house, half a block away, and there found a gentleman about forty-five years of age, fast becoming comatose. He could be aroused with difficulty. From the family I learned that about half or three-quarters of an hour before he had obtained the bottle mentioned—a two-ounce vial, full, excepting what little had evaporated by standing—and drank it all.

The patient was in the habit of going on "sprees," and at this time was just home from one. It was taken with intent to commit suicide, he believing, in his drunken stupidity, that his family and friends—among the very best citizens of this city—were all conspiring against him. He was not in the habit of using the drug in any form, never having taken half a dozen doses of it in his life.

The treatment consisted of emetics, with warm water, strong coffee, belladonna, jaborandi and walking him about. I gave him four doses of mustard flour, each two heaped teaspoonfuls. The first failed to work, the second began to vomit him, the third and fourth, at half hour intervals, with copious draughts of warm water between, did all that emetics could do. Strong coffee was administered and kept down as much as possible, although it was thrown up at times.

Shortly after the last dose of mustard operated two strong men took him into the street and walked him up and down the block, shaking, dragging, and making him walk as much as possible. About once in fifteen minutes he was taken in and given from five to eight drops fluid extract belladonna and coffee, until he had taken four doses of the drug. The coffee was given continuously. No alcoholic stimulants were given, as I believed he had even more than was good for him at the time.

After working over him for six hours I considered him out of danger. I left three half-drachm doses of jaborandi, to be given once in forty-five minutes. This I gave to relieve the throat symptoms, and also to relieve the system, through the skin, of laudanum necessarily absorbed, more or less. I also gave smaller doses of jaborandi, (gtt. v–x) as long as the dryness of the throat continued.

On calling, about 10 o'clock, I found the patient in a profuse perspiration, and a strong odor of laudanum pervading the bedroom and bedclothes, even extending to an adjoining room.

In the afternoon of May 1st he had some symptoms of delirium tremens and spells of vomiting. The latter were very well controlled by bits of ice in the mouth and stomach, and subnitrate of bismuth. The delirious symptoms subsided.

Iced milk was given as food, in tablespoonfuls at a time. Some patches of vesicated mucous membrane from the stomach were vomited, but no serious gastric symptoms presented themselves. The bowels were moved by castorine on the third day. On the fourth he was up, and on the fifth he was out of doors.

I do not know that jaborandi has ever been used in a case like this, but it certainly reached a part of the system out of reach of emetics and cathartics, and in a very prompt and efficient manner. Even members of the family remarked the strong opium odor during the diaphoresis.

Physiological Notes on the Mechanism of Sensations.

The *Journal des Sci. Med.* reports, from the proceedings of the Royal Medical Association of Belgium:—

The theories at present received in science, on the nature of electricity, agree in considering this principle as one of the properties of ether. Ether is looked upon as the common source of light, heat and electricity, with this difference, that heat and light are due to its vibrations, while electricity is the result of its

accumulation or scarcity at a given point, in other words, of its mass or volume.

According to our idea, says M. Bœns, bodies can only exist in nature in a solid, liquid, gaseous or radiant form; they produce nervous, luminous, or electric phenomena, owing to certain particular molecular movements which are communicated to them, and which radiate with more or less rapidity from proximate to proximate, throughout their whole substance, and beyond it. We conceive electricity to be an oscillatory vibration occurring in the integral molecule of bodies.

In like manner sensibility, light, heat and sound, are only the results of oscillations received by and communicated to the elements of matter by bodies while in motion.

Nervous, as well as electric fluid, does not exist.

In support of his theory, M. Bœns reviews the mechanism of the telephone and telegraph, and shows that this mechanism consists in a series of oscillatory vibrations of the particles peculiar to each body or substance, either solid, liquid or gaseous, when submitted to shocks from sonorous waves, or impulses from chemical reactions influencing them.

Applying these ideas to the nervous system, our author compares the visual organs with the telephone, from the eyeball which receives luminous vibrations, to the brain that perceives them, and he argues that the direct perceptions of our different senses, such as sight, hearing, touch, smell and taste, are produced in the same manner as sound is transmitted by the telephone.

The same may be said with regard to *reflex* sensations.

He then undertakes to examine this question: What is ether?

The hypothetic ether of our learned physicists, as well as the terrestrial atmosphere, and human blood, is but an undefinable amalgam of infinitely variable substances, incessantly varying in position and relation, and consequently in intensity and quality. It is the matrix (gangue) resulting from the universal attrition of all the worlds, and of all the atoms which revolve side by side, incessantly attracting one another from all points throughout space, according to the law discovered by Newton, in such a way that there can never be any fixed centre of attraction in the universe.

After laying particular stress on the transformation of luminous phenomena into sonorous phenomena, M. Bœns thus concludes his notice: —

1. Vacuum can nowhere exist.

2. All bodies, in their continuity, consist of atomic aggregates, which may occur under two distinct forms; in one of these forms the atoms or particles allow of interstices between them, which are filled with the liquid, gaseous or radiant substances accidentally enveloping them; in the other form, each atom is but a more or less diffused microscopic mass of the body itself, whose density progressively increases from the periphery toward the centre. In this case there are no interstices between what we term molecules, particles or atoms. That is what must happen in the case of gases and liquids.

3. In this way, it is possible to explain the propagation of sound through gases, liquids and solids, without the hypothesis of an intermediary ethereal fluid, and the propagation of light, electricity, terrestrial magnetism and organic sensibility, without the intervention of any special luminous, electric, magnetic or nervous fluid.

4. Each animal impression due to the exercise of the sensory organs reproduces the special qualities of the agent causing it, in the same way as the telephone transmits the modulations, sound, tone, and all the distinctive characteristics of the different sounds peculiar to the nature and voice of each subject.

5. Every sensation is but the simple effect of intimate *vibrations* or *oscillations*, produced by the conducting filaments distributed throughout each organism.

The Rhythmic Action of the Heart.

Dr. L. R. Weaver, of Providence, Rhode Island, says, in the New York *Medical Record*, May 28, 1881: —

It has long been admitted that the sympathetic ganglia situated upon the heart evolve the force which excites its rhythmic contractions. When a nerve centre discharges this force, which is likened to electricity, it is excited to do so by some stimulus. In the human being this stimulus is the oxygen in the arterial blood, which is brought in contact with the nerve substance by the capillaries. The idea has been advanced by Paget that these local cardiac nervous centres send forth their energy rhythmically, because of a periodicity in their nutritive changes by which they alternately accumulate and set free the nervous influence necessary to produce the muscular contractions, but no reason is assigned for this periodical nutrition.

The coronary arteries branch off from the aorta at an obtuse angle, and run in an almost opposite direction from it, and the resistance to the passage of blood is greater in these coronary arteries during a contraction of the heart. When the heart contracts, the arterial blood is sent with force into the aorta, onward, in the direction of the least resistance (the branches of the coronary arteries being compressed in the muscle), and the aorta distends. During the relaxation of the heart, the walls of the aorta, owing to their elasticity, recoil, and the reflux of the blood closes the semilunar valves, the pressure is removed from the cardiac vessels, and the blood again flowing in the direction of the least resistance enters the coronary arteries. On reaching the capillaries it nourishes the muscle and the ganglia. This chemical change constitutes the natural stimulus, evolving heat, and the discharge of nerve force or electricity, which causes the heart to contract upon its contents, for during this time its cavities have been filling up with blood from the venous trunks.

This circle of action is thus complete, and the requirements for the healthy action of muscle (as given by Marshall) are fulfilled, viz.: "In order that a muscle should contract properly, its temperature must be at a due elevation, its supply of blood must be sufficient in quantity and of proper quality, and its nutrition amply provided

for in the intervals of contraction. Arterial blood is essential to the healthy maintenance of muscular contractility."

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Edward Borck, of St. Louis, Mo., sends us a reprint from the *Indiana Medical Reporter*, for April, 1881, on "Simple Methods to Staunch Accidental Hemorrhage."

——*Godey's Lady Book* for July is a gem in its entirety. The Fashion Plates, Steel Plates, general illustrations, and the literary contents combine to make this old favorite leader of the fashion periodicals the best that is before the public. Quite a lengthy and highly entertaining novel from the pen of "Sue Chestnutwood," and the usual array of stories and miscellaneous matter from excellent authors. The July number begins the One Hundred and Third Volume, which of itself speaks well for the hold that the magazine has upon the lovers of pure literature.

——The name of the corporation formerly known as Scribner & Co. (publishers of *Scribner's Monthly*, *St. Nicholas*, etc.) has now been changed to The Century Co. The title of *Scribner's Monthly* will become *The Century*, with the next volume. *St. Nicholas* is slightly changed as to its sub-title, being now *St. Nicholas, an Illustrated Magazine for Young Folks.* The July numbers of these magazines are the first to bear the new corporate imprint.

Scribner for July contains a paper of special and timely interest, "The People's Problem," in which the writer takes the ground that the time has come for the people of this country to

& Co., 1, 3 and 5 Bond Street. 1881. 8vo, vol. i, pp. 767; vol. ii, pp. 861. Price, cloth, $9; sheep, $11.

Since the death of Professor Niemeyer, in 1871, a new edition of his "Practical Medicine," which has come to be pretty universally recognized as a standard text-book wherever introduced, has been issued, under the editorship of Dr. Eugene Seitz. The translators state that in condensing the original text, in order to give room for a vast amount of new matter which he has inserted, the new editor has sacrificed much of the charm of style and graphic description peculiar to the original, for which reason they have, in preparing the revised American edition, adhered as closely as possible to Niemeyer's original text, while drawing freely, not only from the last German edition, but also from other sources, in order to bring the work up to the present standard of medical science. Several new chapters have been inserted, among others one upon yellow fever, compiled chiefly from Bartlett's "Fevers of the United States," which cannot but render the book more useful to American practitioners. It seems to us a little strange that the author, who was the champion in Europe of the empirical method of therapeutical investigation, and who regarded clinical observations as the only means of arriving at any knowledge that would prove of value in the treatment of disease, should have utterly ignored, as he does, some of the best established facts in therapeutics. Thus he makes no mention, whatever, of the ipecacuanha treatment of dysentery, which is regarded as little less than specific by those who practice in countries where this disease prevails, and who have given it a fair trial. It is true, he recommends ipecac. or tartrate of antimony as an emetic in cases where the stomach is filled with undigested substances, but that is not the way in which it is employed by those who know its value; in fact, it seldom produces emesis, even when given in forty-grain doses, while the relief obtained by the cessation of pain and tenesmus is often almost instantaneous. With the exception, however, of a few slight defects of this kind in the therapeutics of diseases peculiar to tropical climates, which are pardonable, as the work is not a compilation, but the outcome of personal observation, and is characterized throughout by the individuality of its author, we regard it as one of the most valuable treatises on medicine, and destined to pass through many editions, even in this age of rapid book-making, before any other work will take its place.

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SUGGESTIONS TOWARD A PLAN FOR REORGANIZING MEDICAL SOCIETIES.

Reviewing the general professional proceedings of the six months just closed, the observer will have cause to be gratified with the increased attention which medical legislation has received. Recently we gave a brief review of what had been done in a number of States, and although it was very far short of what ought to have been accomplished, it was more than many winters have furnished. Whatever shortcomings are obvious are, as we have more than once taken occasion to say, at bottom the fault of the medical profession itself, of its lack of united and systematic endeavor.

The political theories of this country have, in the last score of years, been gradually tending toward greater centralization. This is contrary to the original doctrines of "the fathers of the Republic," particularly those of the school of Thomas Jefferson, but they were not omniscient and infallible, and it is probable that this tendency has been forced upon our people, almost unwittingly, by the logic of events, by which is meant the necessities of the hour. Great general aims can be accomplished quicker and cheaper by a well directed central authority acting through trained and intelligent subordinate authorities than by a series of competing equals.

These political considerations are introduced here as the preface to some suggestions for a reorganization of the medical societies of the United States. As at present constituted they are far less efficient in the promotion of legislation than they should be. What is needed is greater centralization. What we require in order that the profession exercise the most potent influence, is that all medical societies be distinctly but branches of one central society, of which every regular physician should have to become a member, if he joins any.

It is estimated that at present the membership of the American Medical Association varies to the extent of nearly one half every year—that is that not more than fifty per cent. of those in membership this year will remain so next year. This is easily understood, from the constitution and bylaws of the Association. The result is that its influence on general or State legislation is very small indeed.

We shall now suggest a plan for concentrating the medical power of this country, and while submitting this plan as one that seems a good one, we shall be glad to have a discussion of the whole subject opened up in this journal.

severe coughs arises from the effect of the ammoniacal odors present.

TRÉLAT'S ANÆSTHETIC MIXTURE.

M. Trélat, the Parisian surgeon, finds that for slight operations the following mixture, administered three quarters of an hour beforehand, will often produce sufficient anæsthesia:—

℞. Hydrate of chloral, ℥j
Syrup of morphine (Fr. cod.), ℥iv. M.

If greater effects are wished, a few whiffs of chloroform may be given without awaking the patient.

AMMONIACAL COPPER SULPHATE IN NEURALGIA.

This agent, introduced by Dr. Férèol, may be prescribed as follows:—

℞. Ammoniacal sul. of copper, gr.ij–iij
Simple syrup, ℥ij
Mint water, ℥iij. M.

This amount to be taken twice daily, at mealtimes. Or:—

℞. Ammoniacal sul. of copper, gr.x
Extract of valerian, gr.xv
Extract of opium, gr.ij. M.

Make twelve pills. Two daily, in cases of much stomachal irritability.—*Dr. Deligny.*

In obstinate cases of trifacial neuralgia, this agent gives, at times, extraordinary relief.

ANTISEPTIC STIMULATION IN TYPHOID.

Prof. Bouchard (*Le Concours Med.*, Mai, 7) recommends that stimulants used in typhoid fever should be mixed with antiseptic substances, in order to prevent purulent infection from the intestinal lesions: for instance—

℞. Rum, ℥iv
Creasote, gtt.ij
Phenic acid, gr.iv
Salicylic acid, gr.xv. M.

Small quantities of this or a similar antiseptic stimulant may be given, as required.

Notes and Comments.

Therapeutic Notes.

LUTON'S EXHILARANT MIXTURE.

Dr. Luton, of Reims, has found that the following mixture produces a highly exhilarating effect, somewhat similar to that of nitrous oxide, especially in excitable temperaments:—

℞. Tincture of ergot, 5 grams
Sol. of phosphate of soda ($\frac{1}{10}$), 15 grams.

Take in a quarter glass of sugared water.

This produces "a lively gaiety and uncontrollable hilarity."—*Bull. Gén. de Thérap.*

INHALATION OF CARBONATE OF AMMONIA IN BRONCHITIS.

In the *Journal des Sciences Médicales de Louvain*, May, Dr. Melsens recommends, in chronic bronchitis, to carry on the breast a sachet containing some pieces of carbonate of ammonia. The patient thus respires an ammoniacal atmosphere, and finds great benefit from it. The popular notion that the air of stables is beneficial in

Grindelia Robusta as a Remedy in Asthma.

Dr. T. M. Rochester, in the *Proceedings of the Medical Society of the County of Kings* for May, 1881, says that he has employed the grindelia robusta for more than two years, both in dispensary and in private practice, having used it in more than sixty cases of which he had taken notes, and as many more without any record, and that in no single instance has it failed to effect a prompt relief. It has seemed to be of equal efficacy, whether employed for simple spasmodic or for inflammatory asthma. In two cases of cardiac asthma, when combined with the other remedies, it has relieved the dyspnœa as nothing else would. It is useful both during the paroxysm and in the intervals, although it is to be given differently in the two instances. For the

former it should be administered in half-drachm doses of the fluid extract every fifteen minutes, until the spasm is relieved. At other times it is to be given in fifteen to twenty-drop doses, at intervals of from four to six hours, and continued for from a week to ten days, when, except in very obstinate cases, it will have accomplished what was intended, and the patient will experience relief for a period of six or eight months, and in many cases longer. At the approach of another attack the use of the drug for a few days will be found all that is necessary.

My usual dispensary formula for its administration is as follows:—

℞. Potassii bromidi, ℥ ss
Fl. ext. grindeliæ robustæ,
Syr. ipecacuanhæ, āā ℥ j
Aquæ puræ, ℥ ij. M.
Sig.—Teaspoonful every four hours.

He has also used it with marked benefit, in a great many cases of bronchorrhœa and chronic bronchitis, as an adjuvant to other measures.

On the Pathological Condition Causing "Metallic Tinkling."

Dr. F. Peyre Porcher, of Charleston, S. C., reports, in the *Virginia Medical Monthly* for May, 1881, a case of "Metallic Tinkling," stating that during seventeen years' hospital experience, with the constant practice and teaching of auscultation and percussion, he has heard it in but three cases, and being greatly desirous of investigating the causes, he hastened to make an autopsy of the last example.

It occurred in a male, æt. 25, in the City Hospital. He had pleurisy, or pleuro-pneumonia, four years previously, and he entered August 28th, with cough and with gurgling, crackling and other signs of a cavity in the apex of the left lung. But it was the right lung which now attracted particular attention, there being heard throughout its upper lobe an extremely well marked metallic tinkle—a decided "clink," upon inspiration; and upon both this and expiration a sound as if the breathing occurred in a cavity lined with a delicate film of copper or other metal. This was obvious to the house physician, Dr. Burgess, and to all who listened to it during seven or eight days.

Death occurring on the 12th of September, a post-mortem examination was made, when the following conditions were revealed:—

The lung was enveloped in a stratum of air; pneumothorax existing from the old pleuritic effusion, which had been absorbed. One border of the upper lobe, to the extent of an inch in length,

pectoration, is not followed by injurious results produced by the irritating properties of the inhalation. We should, therefore, recommend our readers to carefully watch the use of any such preparations.

Cider Preservative.

The following communication to the *American Journal of Pharmacy*, by F. L. Slocum, may prove of value to some of our readers in rural districts:—

About a year ago I analyzed a sample of a cider preservative that was being sold here at the rate of $2.00 per ounce; it was simply *salicylic acid*. It has been extensively used here, and samples of cider that have been kept for from six months to a year still have the peculiar flavor of sweet cider, and *are* sweet cider.

One ounce is sufficient for a barrel of thirty-two gallons. Put the acid in the sweet cider and mix well, then bung up; it will not ferment. For the preservation of sweet cider salicylic acid is far superior to bisulphite of lime.

Special Reports.

NO. XII.—ANTISEPTICS.

The attractive germ theory of disease has led to an extraordinary amount of attention being paid to antiseptics, disinfectants, antizymotics, germicides, and all that class of products.

In a monograph of Dr. Chown, quoted in the London *Medical Record*, January 15th, he gives a method

To Determine the Relative Value of Antiseptics.

This method is founded on a knowledge of the fact that when blood commences to putrefy, the spectrum of hæmoglobin undergoes a modification; for the two characteristic absortion-bands of oxide of hæmoglobin there is substituted the characteristic band of reduced hæmoglobin. This gradually becomes paler, and finally disappears as the blood becomes more decomposed. The author suggests that a measure of the efficacy of a given disinfectant may be obtained by observing how far it is capable of retarding or arresting putrefaction, as shown by this spectroscopic test.

The author details his experiments at considerable length, some of which were performed on living animals. His conclusions are as follows:—

1st. The spectroscope is capable of furnishing a precise indication of the relative value of certain antiseptics. From the list, however, of such, must be excluded those antiseptics which, like sulphate of zinc, or alum, or tannic acid, act chemically on the blood and decompose the hæmoglobin. So also must be excluded certain other substances, which impart a peculiar color, or have a spectrum proper to themselves, such as potassic permanganate, sanguinaria, etc.

2d. The spectroscope demonstrates that certain substances are, in the proper sense of the word, antizymotic or anti-reduction agents.

Of antiseptic substances, or those which check decomposition, the most efficacious are, in order, *chloral*, *arsenious acid*, and *arseniate of soda*. In the same category, but much inferior in strength, are boracic acid, borate of soda, and lupuline.

A somewhat similar comparative investigation was recently made at St. Petersburg, by Dr. N. Schwarz, an account of which we find in the *American Journal of Pharmacy*, May. The experiments were conducted in the pharmaceutical laboratory at Dorpat, and are thus described:—

The nourishing liquid was a solution of ten grams white sugar crystals, one gram of ammonium tartrate and 0.5 gram of potassium phosphate in 100 cc. distilled water. 20 cc. of this liquid were infected with 3 drops of infusion of tobacco, about two days old and turbid from numerous active bacteria. The most active antiseptic tried was picric acid (1 in 10,000 to 15,000); then followed iodine, sodium borosalicylate, hydrocyanic acid and aluminum acetate (1 in 5000); oil of cinnamon (1 in 2500); arsenic acid, cinnamic acid and vanillin (1 in 2000); chloral-hydrate, chrysophanic acid, and rhinacanthin (1 in 1000); tannin and Peru balsam (1 in 666); styracin, camphorated phenol, oil of cloves, copaiva and gurjun balsam (1 in 500). The following had to be used in more concentrated form: gallic acid, monobromated camphor, boric acid, borax, magnesium, mono- and di-borocitrate, benzohelicin, mongumic acid, peonyfluorescin, zinc sulpho-carbolate, potassium xanthogenate and potassium chlorate. Glycerin was active only in the dilution of 1 to 3, and sublimed sulphur, magnesium triborocitrate, saltpetre, chloroform, salicin, bile and sulphuretted hydrogen possessed only a slight or indifferent activity.

At the Chemical Society of London, in April Mr. W. M. Hamlet read a paper "On the Action of Compounds Inimical to Bacterial Life." The cultivating fluids used comprised Pasteur's fluid, beef tea, hay infusion, urine, brewers' wort, and extract of meat. These are sterilized by boiling for ten minutes in Pasteur's flasks, cooled with suitable precautions, and then seeded with hay solution, and the substance under examination added. Many gases, etc., were tried. Chlorine and hydric peroxide were fatal to bacteria, while chloroform, creasote, carbolic and salicylic acid, etc., hindered their development, but did not destroy them.

Disinfection of the Atmosphere of Rooms.

A writer in the *Lancet*, December, 1880, urged the use of a steam "bronchitis kettle," to disinfect the atmosphere of sick rooms. He placed tow wet with carbolic acid in the nozzle. He observes:—

It is very remarkable to note how grateful the purification of the atmosphere of a sick-room is, both to patients and to attendants. Cases of severe pneumonia have been strikingly benefited by the use of carbolic-acid fumigation, and in cases of diphtheria some such arrangement should be continuously in use, both for the benefit of the patients and also for the protection of attendants and fellow-occupants of the ward. In a case of great gravity I had an elastic tube fixed to the kettle, and the funnel with the carbolized steam flowing from it was brought close to the bed of the patient, giving wonderful relief to his sufferings. Every sick ward—that is, wards constantly used for sickness—ought to be furnished with the means of antiseptic fumigation, and there are few cases that would not bear the antiseptic steam diffused by this apparatus.

In an article in the Dublin *Medical Journal*, of

June, Dr. J. Lane Notter writes to prove that the most efficient disinfectant for the air of a room is *nitrous acid*. He believes that in this substance we have a chemical agent which will arrest the development and further reproduction of septic microzymes, and which is, therefore, capable of destroying contagion. This position he demonstrates by various experiments on putrefying solutions containing active bacteria. The nitrous acid may be generated by the action of nitric acid on copper wire.

Antiseptics in Surgery.

"Listerism," as it has been called, seems to hold its own in spite of the severe criticisms of those who claim it is nothing more than cleanliness made difficult. Some points in its details are worthy of note. In the Glasgow *Medical Journal*, for last November, Dr. Beatson had a very good article on "The antiseptic method of treatment," from which we extract his directions about antiseptic sponges:—

How to Prepare Sponges.—1. They should never be immersed in boiling water, as it has an injurious effect on them, especially in cooling, causing them to shrink and become hard and tough. 2. Sponges should never be wrung; it breaks their fibres and injures their elasticity. They should be *squeezed* dry. 3. In an ovariotomy count the sponges, and on no account allow any of them to be cut during the operation. 4. When required for an operation the sponges should be removed from the jar of 1-20 lotion in which they were soaking, and be placed in a basin with 1-40 carbolic lotion around them. 5. As required, they should be handed one by one to the surgeon, being first squeezed quite free from all lotion. 6. If it is necessary to have a number of sponges lying ready to the surgeon's hand, a towel should be wrung out of 1-20 lotion and laid over the patient near the seat of operation, so as to serve as an antiseptic basis on which they may be placed and be within reach, and also within the area of the spray. It is very risky to lay sponges down anywhere outside of the spray. 7. The dirty sponges should first be squeezed free from the blood, into some suitable receptacle, and then washed in the 1-40 carbolic lotion, after which they are again squeezed dry and handed as wanted. 8. If it can be arranged, it is convenient to have such a number of sponges that they do not require to be used more than once during an operation.

How to Clean Sponges.—The soiled sponges are soaked for twenty-four hours in a solution of the common muriatic acid and water, of a strength of 1-8. This cleanses them thoroughly from blood, oil, or any other impurity that may be present in them, and renders them quite white, after which they are washed in warm water, which is changed two or three times, the sponges being squeezed and pressed with the hand each time. They are then placed in an earthenware jar with a lid on it and allowed to soak in 1-20 watery solution of carbolic acid until required.

In making Lister's boric acid salve, the ordinary formula yields a hard salve, brittle in cold weather, and not convenient. The following formula has been offered as a substitute by a writer in the *Phar. Zeitung*.

℞.	Melted paraffin,	℥ ij
	Oil of almonds,	℥ iij
	When cold, mix	
	Powdered boric acid,	℥ iss
	Soft paraffin,	℥ ij.

The ingredients are said not to separate, and the salve will keep for years.

Lister's antiseptic gauze is prepared, according to C. Merciéres, by melting together resin 5 parts, paraffin 7 parts, and crystallized carbolic acid 1 part, and dipping into the mixture for about five minutes pieces of unsized gauze or muslin. The excess of the mixture is removed by slight pressure, the fabric is spread out in layers, covered on both sides with pieces of gauze to prevent the dropping off of the carbolic mixture, and after having been placed between two slabs of marble for about twelve hours, completely dried by exposure to the air.

Antiseptic Treatment of Erysipelas.

Subcutaneous injections of *carbolic acid* have been extensively used in Germany for the local treatment of erysipelas. The affected region is enclosed by a series of injections of a one per cent. solution, and these are repeated daily, morning and evening, until the fever has subsided. They appear to produce no local irritation. M. Flaminio Tassi has lately recommended *picric acid* for the same purpose. He was led to employ it by the consideration that this acid, penetrating into the deeper layers of the skin, exercises an astringent action on the vessels, and also acts as an antiseptic. The astringent action may be expected to lessen the migration of leucocytes, which, as Wolmann and Steudner have shown, attends the erysipelatous dermatitis. In four cases in which he has employed this method of treatment, the extension of the inflammation was effectually arrested, while the patients have complained of no inconvenience. In addition, compresses wetted with a saturated solution of this acid were applied over the inflamed area.

Antiseptics in Gynæcology.

Both in gynæcology and obstetrics the antiseptic treatment has an established foothold all over the world. In the Boston *Medical and Surgical Journal*, Nov. 15th, Dr. Elliot concludes that the weight of microscopic and clini-

cal testimony goes to show that puerperal fever and the diseases caused by the absorption of putrid poisons are one and the same. The finger of the examiner, the instruments, etc., are the carriers of the disease in the great majority of cases. In cleanliness and antiseptics, we possess both prophylactic and curative means. Looking at ovariotomy as an example, much improvement in the results of gynæcological operations may be hoped for by doing them antiseptically. A beginning has already been made in operating about the vagina and cervix uteri under a constant stream of carbolized water, and applying antiseptic dressings. The mortality from dilating the uterus has been greatly reduced by using antiseptic precautions.

The antiseptic management of parturition is now carried out in full detail in the Maternities of Copenhagen, Berlin, Prague, and other European cities. The result has been an extraordinary diminution in deaths from puerperal fever and other forms of blood poisoning; in one instance the mortality was reduced from 1 in 32 to 1 in 144. The consideration of this branch of the subject will, however, come up more properly in a report on obstetrics.

(To be continued.)

Correspondence.

Talipes Equinus: Pott's Disease, etc. A Talk with Prof. Lewis A. Sayre.

Ed. Med. and Surg. Reporter:—

I recently had an interesting conversation with Prof. Sayre, of which I made notes, and on reviewing them, there seems to me so much in them of general interest, that I forward them to you for publication. The Professor said:—

There has come to my notice recently an interesting case that had passed through the hands of a number of gentlemen in this city during the past two years, and has even been in the hospital wards for some time, without having been recognized; while treatment has been given the case, it has been a treatment wrongly directed. As ordinarily found, talipes, in its various forms, is a more or less well marked condition; or in other words, club-foot, of whichever nature, is, in ninety-nine cases out of a hundred, so well characterized that he who runs must observe. It does occasionally happen, however, that this rule has an exception. Let us compare some cases: we have here a man, in whom the weight of the body, instead of being transmitted in an almost direct line through the heel to the ground, is transferred to the ball of the foot, the heel being drawn up from two and a half to three inches by the contracted tendo-Achillis. As a companion picture or case is this other man, who presents the condition of talipes equinus in the most extreme degree; the heel is pulled up till the only part of the foot in contact with the ground is the tip of the great toe. Now, no man needs to be told what the trouble here present is; they are extreme cases, that tell their own story, and suggest their own method of relief, about which I have a very important hint to make later.

Now, if anything has one extreme, it logically follows that it has another, and this proposition is essentially true of talipes. There may be a state present in which talipes is not at all suspected, of which fact this case under discussion is a shining example; for two years he has been treated for what on the face appeared to be a condition of paralysis of the extensor muscles of the leg. As he stands before us we would not, even when examining him, rather critically, detect any club-footed condition; he seems to rest fairly well on the heel of the foot, and to present rather the condition of extensor paralysis than anything else. So little, in fact, is a talipetic condition present that I was myself at first deceived; but on delving more deeply into the case, I noticed that there was an unusual curve in the arch expressed between the points of contact of the heel and the ball of the foot, and I noticed further, that while the *under* and *fore* part of the heel came well down to the ground, the posterior portion did not do so markedly; that there seemed to be some power holding it in check. Seeing this state of affairs I was led to suspect a condition of talipes equinus, and to apply an unfailing test for the discovery of this condition. If a rope be taken and put in a state of extreme tension, and then pressure made on it, there will be a characteristic reaction; now, in the same way, if the tendo-Achillis is thus forcibly extended, in cases of suspected equinus, and then pressure with the finger or a sudden sharp stroke is made upon it, a reflex action takes place, manifested by a spasmodic condition or reaction, reflex in character, of the extensor; this is characteristic and cannot be mistaken. Now, for the relief of any and all of the three conditions discussed, there is but one mode of procedure, and that is tenotomy of the binding tendon. Unfortunately, though, there has grown into repute a way of doing this operation that is. I am tempted to say, almost criminally wrong. There has been inculcated in the average medical student, and the profession generally, teachings that are essentially false.

If a tenotomy must be done, do it, and do it thoroughly and *philosophically*. There has gone abroad through the profession an idea that, to secure a prompt and strong union of the divided ends of the tendon, the foot should not be put in a state of extreme tension; that the ends of the tendon must not be, at first, widely separated, but left in such a state that the effusions from the two extremes may readily and rapidly unite. Now, this notion is radically erroneous; let us see what it results in: a tenotomy is performed; the opening made by the tenotome is hermetically sealed. So far very good; then the shoe or extending apparatus is put on the foot, and gently screwed up, so as not to too widely separate the ends of the divided tendon; in this position it is left till the two ends become united by the effused matters, and more or less organization has taken place; now, then, the surgeon's work again commences; a new tendinous material having been

poured out, that manifestly, from its recent organization, is not prepared to be worried and irritated, is to have exerted on it a stretching force, which extending power is to be increased daily, or weekly, till the tendon is stretched or drawn out into the length required. In other words, an India-rubber process of cure attempted, with the proviso forgotten by the advocates of this primitive procedure, that even rubber loses its elasticity when constantly stretched and kept under the influence of an extending force. The result is, that when the patient gets through with his stretching experience, he has, perhaps, not an equinus to comfort him, but a debilitated, over stretched tendon. I would, therefore, lay it down as a rule absolute, that no matter what tissue is to be divided, muscle, tendon or fascia, do it, and do it thoroughly, and *at once* bring the limb or part into the position that it is intended it shall eventually and permanently occupy, *and keep it there.* Nature will be careful to effuse material enough to again join the severed structure, no matter how extensive may be the gap, and it will secure and maintain a strong, healthy connection, that has not been badgered to death by stretching, and weakened beyond hope of a healthful recovery. I speak strongly in this matter, for I feel that it is a subject but too little, and very often wrongly, understood, by the general practitioner and surgeon.

There is another subject, while not directly allied to talipes in any shape, is yet one which I find in my daily practice has not yet become understood by many of the profession. I refer to Pott's disease and its treatment by means of the plaster jacket. While the pathology of the disease is now fairly well comprehended by surgeons, yet they seem to persist in making an error in regard to the best, and, I am tempted to say, the easiest manner of treating the complaint. Changes, almost innumerable, have been made upon the various mechanical appliances that have been devised for the relief of the unhappy sufferers from this complaint. I have daily coming to me patients who inform me that the remedy is as bad, and perhaps worse, than the disease; and truly I can believe them when I see upon their skins spots of ecchymosis and ulceration denotive of the points upon which iron braces and pads have been made to push and pull, in the vain hope of thus forcing the column into place, and then keeping it there. Others, again, are the victims of the wheel-chair mania, or some of the modifications of an apparatus to support the shoulders by passing the body through an open framework supported upon wheels, and allowing the body to drag from supports catching under the axillæ, the feet touching the ground, the plea being that thus the sufferer is allowed the boon of out-door exercise; but while this may be granted, yet it is a favor for the enjoyment of which he pays dearly, by the fact that he drags around with him a burden that, by its very weight, draws out of him the strength that it is so essential that he retain.

Now, I contend, and I think by the record of my cases I am justified in assuming the ground, that any apparatus further than a bandage, best made of cross-bar muslin, cheese cloth, or crinoline, some plaster-of-Paris and water, is not at all necessary, for the treatment of Pott's disease. But I must attach this proviso: the apparatus must be applied correctly, and further, that the patient must not be made to feel that he is about to be martyrized at every renewal of the jacket. I know of people who have come here with the expectation, not unfrequently originated by their medical attendant, that they were to be hung up, in much the same manner as we would hang up a sheep to dress it; that they were to be tortured, etc.; and at times, I am sorry to say, sad experience has been their teacher in this matter; they have had jackets applied by those whose education and judgment should have dictated a proper and rational course to be pursued in their application, but who, unfortunately, transgressed one of the golden rules of the procedure, namely, *that never, under any circumstances or conditions, be they what they may, should the extension of the patient's body be carried beyond the point of absolute and easy comfort*, for there is nothing to be gained and everything to be lost by transgressing this rule. The idea of hauling patients up and leaving them to swing round and round unsupported, while the bandage is applied, in order, as argued by the votaries of *absolute* suspension, to get the utmost extension, and consequent straightening of the spinal column, is simply barbarous, and has nothing to recommend it, either in poetry or reason. The patient must learn to have confidence in, and not fear of, him who seeks to relieve him, in this as in all other procedures in our art. The sufferer must himself be the judge of the amount of comfortable extension; he can be elevated to that point, and then allowed to hold himself there by means of the pulley cords, upon which a small, spindle-shaped, wooden sliding handle, should be placed, for the patient to grasp, this being secured from slipping by means of a knot made in the rope beneath it; *he should never be suspended so that his feet do not rest upon the ground sufficiently to afford a fair amount of support.*

Further, in regard to the shirt to be employed: we are wont to give the name skin-fitting to any ordinary gauze shirt, or vest, such as is commonly used for summer underwear, whereas, the fact exists that in ninety-nine cases out of a hundred they are not skin-fitting, but more or less creased, and consequently, I hold, unfitted for the purpose here in view. I make it an invariable rule to have each patient's shirt woven to fit him; he is sent to a manufacturer of these goods, who measures him over all the angles and curves of the trunk, and then weaves a seamless shirt in accordance with these measurements. Placing a shirt on a man, that, to fit him skin tight, has to be creased and doubled, is not the correct thing; a creased stocking is not pleasant to wear, and a creased shirt cutting into the flesh, already at a low ebb of vitality, beneath a case jacket, is but another form of Dante's Inferno.*

Another error that I have found the practitioner to make, though this is more characteristic of the English surgeons than our own, is the permitting of instrument makers, etc., to put on a plaster

* The measure in fitting a shirt should be taken around the bust, waist, hips, and the length of the body from the shoulder down to a point about two inches beneath the perineum.

jacket. I could never comprehend why, as we never permit an instrument manufacturer to dress and bandage a fractured limb, there should be delegated to him the dressing of a diseased spine, unless it be, indeed, the dread of slightly soiling one's own hands, which, of course, may be, with some, a great consideration. As to substitutes for plaster jackets, such as felt, leather, etc., I have this to say: you can never make them fit as tightly, accurately, and nicely as a plaster jacket. It is absolutely essential, in the treatment of these cases, that an absolute fit be obtained, especially around the hips, as otherwise precious time is lost, and irreparable damage may be done. There can be no question that a leather jacket, after having gone through all the processes necessary for its manufacture, does not fit as closely as the original jacket from which it was fashioned, and consequently one of the cardinal points of the treatment is violated.

Again, it is not at all essential that the jacket, when finished, shall measure half an inch in thickness, as I have seen them; nor yet should dry plaster be rubbed over the bandages while still wet, to give the dressing a finished appearance; it simply requires to be calcimined, so to speak, by rubbing the bandages with the wet hands; thus finished the patient does not leave in his track a line of plaster chippings. After the plaster has set, any portion of the shirt extending above orbelow the jacket, as well as the portion knotted over the shoulders, should be cut off; at any point where the jacket impinges unpleasantly a small section should be removed. Ordinarily there should be placed over the mammæ, in girls, pads or woven screens, that can be withdrawn after the dressing is completed; it may be well, also, in both sexes, to fit the jacket after dinner or a full meal, in order that the stomach may not be pressed upon when in a state of repletion, as it would be if it were fitted over an empty stomach. Before commencing the application of the bandage the shirt should be secured in position by means of a nursery pin, passed through the skirts of the shirt, close to the perineum. In case it is desired, the jacket can be slit up in front in about twenty-four or forty-eight hours, and lacers inserted, thus permitting ablution, etc., to be performed; but this remark applies rather to the second than the first jacket, which should be retained *in situ*, uncut, for some length of time (a month or six weeks), in order to afford the best possible support. It probably will transpire that, at the end of a week or ten days, the jacket, if examined, will be found to have seemingly grown too large for the patient, over the scapulæ or the ilium. The remedy for this is to remove a wedge-shaped portion marking the greatest amount of seeming enlargement, to bevel the remaining edges, and by a series of, first entirely circular, and then *loosely reversed* turns, to cover in the gap, finishing off by a few circular turns around the trunk, in the same manner as the first turns. The piece removed will denote the amount of straightening gained, the measure taken being from the integument to the inner aspect of the section, before removal, when placed somewhat on the stretch. In a case of a lady of this city, seen by the reporter, this amounted to as much as two inches in a case that had been under treatment for about ten days, and in whom, before the application of the jacket, the space between the inferior angle of the scapula and the crest of the ilium barely admitted the insertion of two fingers' breadth. It is interesting to study, from week to week, the amount gained, and not only gained, but permanently retained. Of course, it is essential that the patient be placed upon a generous diet and tonics, with which latter, however, the patient must not be flooded, and that he take out door exercise, being permitted to walk and move around as freely as he wills, with the reservation that he do not tire his system too much; in other words, that he be governed by the rule of a "happy medium," remembering that in overdoing himself, every ounce of vitality carelessly used up will be by nature required to be compensated for by more prolonged suffering. As to the time that the jacket must be worn, there can be no rule; every man is a law to himself in this case; just so long as the vertebræ feel that they need the support, just so long will the man's feelings dictate to him to retain it; in fact, so much is its function like that of a corset, that its removal becomes, after a time, as much of a loss as the loss of that piece of apparel; there is such a certain sense of security, and of being braced, about it, that it becomes rather pleasant than irksome to wear; at least, this is the testimony of a number to whom the reporter has spoken, and who, of course, should be capable judges.

Philadelphia. G. F. S.

Crude Petroleum.

Ed. Med. and Surg. Reporter:—

I have for some time contemplated availing myself of a brief space in your widely read columns for the purpose of calling the attention of your numerous readers to the medicinal use of crude petroleum. I have been prescribing this new remedial agent for about a year, and the results of said use have been so perfectly satisfactory that I do not feel that I would be doing my duty to suffering humanity were I to keep silent in regard to it. I have given crude petroleum in all forms of bronchial, pulmonary, and pharyngeal troubles, and I am happy to bear record that in every instance its effects have been to greatly relieve and palliate, if not to work an entire cure. I have found it far superior to cod-liver oil in phthisis, as its effects have been not only to relieve the cough and allay the extreme pulmonary irritation, but it improves the appetite and overcomes that indifference and distaste for food, increases the weight of the body and begets a sense of comfort which I have seen exhibited by none other of the noted remedies usually given in these cases. I will mention a case of mine now under treatment. Mr. Robert S., a farmer, 56 years old, has always been a laborious man, but for a year his health has been failing, and a confirmed cough has fastened itself upon him, with severe pains and cramps, "stitches," as he calls it, through his left lung, and very free expectoration of blood for some two or three months previously to applying for treatment, almost amounting, at times, to a profuse hemorrhage. I gave him a purgative of three Cook's pills and directed

croton oil externally, and pills of four grains of crude petroleum and three grains pulv. Doveri, as constitutional treatment. After taking the pills two weeks all signs of blood in the expectorations had vanished, pain had almost disappeared, his appetite had improved, cough greatly benefited, and now rapidly subsiding. After being under treatment less than a month, he is able to return to his farm labors, but I have suggested he continue treatment for not less than six months, as several of his ancestors have died of consumption. I have another case who relapsed from pneumonia and took a very severe cough, became confined to his room, and after six months' treatment his medical attendant told him to employ other professional advice if he chose, as he could do nothing more to relieve him and considered his case hopeless. This patient was placed upon the above prescription without the ol. tiglii, and after six weeks' taking the pills I was yesterday called to see a married sister of his, three and one-half miles from where he resides, and found he had shouldered his gun and walked to her house during the morning. This latter patient is of a marked strumous diathesis, in addition to being an epileptic from childhood; he is now 25 years of age. He had become very much emaciated on account of want of appetite, and when he did eat would cough so severely as to cause him to vomit up his food immediately afterwards. I have usually procured my supply from Dr. M. M. Griffith, of Irving, Chautauqua Co., N. Y. I would scorn writing an article for a high-toned medical journal that had the color of advertising any special source of supply for any medicinal preparation, but I must say, in justification, that I was forced, in an emergency, to supply myself elsewhere, and the result was by no means satisfactory. Hoping the profession will investigate the effect of crude petroleum causes me to indite this paper. It can be given in pill or capsule. C. S. Strother, M.D.

Orange, Cherokee Co., Ga., June 1, 1881.

Poisoning by Stramonium.

Ed. Med. and Surg. Reporter:—

I was called, on the 3d inst., to see two children of Mr. J. H., aged eighteen months and three years respectively, both of whom, I was informed, had been poisoned by swallowing stramonium seed, which had occurred as follows:—

A little girl, aged six years, was "playing doctor," and the two children mentioned, acting as patients, were given the seed, representing pills. The younger child had evidently been less dosed, as its symptoms were less intensified.

I presume the would-be-doctor had the same difficulty the older members of the profession often realize in administering remedies to an incorrigible child. As the condition of the child aged three years was the more critical, I will only give a history of its case, and the treatment. Its surface was intensely red, skin hot and dry, pupils largely dilated, pulse full and bounding, moderately accelerated, tongue and fauces dry, tetanic contortions, and its sufferings apparently intensely agonizing. It acted as if falling from some lofty point and catching at every conceivable object. It was impossible for me to get its temperature. After being fully assured that the child had been poisoned as stated, I first directed my attention to the stomach, hoping to dislodge some of the undigested seed. I first gave salt, mustard and warm water; failing to accomplish my object, I gave ipecac., with a like result. I then resorted to the old time-honored feather, which brought away a considerable quantity of undigested food and a few stramonium seed. After having emptied the stomach of its contents, and its contortions continuing, I gave chloral hydrate and bromide of potash. In the course of one hour, and after the second dose had been given, the child went into a quiet sleep; six hours afterward it awoke, free from the symptoms of the poison. The following day it appeared weak, though it rapidly recovered. J. M. Pace, M.D.

Dallas, Texas.

Maternal Impression.

Ed. Med. and Surg. Reporter:—

Your editorial on maternal impressions, and last week the article of Dr. Rawlins, brings to my mind a case strongly in point, which I will relate briefly:—

I was called, about three o'clock on the morning of March 27th, 1878, by Mr. H. He said his wife had been delivered of a child about half an hour before, and that the child was not right. On examination, I found the head drawn out in the form of a sheep's head and covered with black wool, which also extended down the neck, across the shoulders and back and down the outside of the arms. The two central incisor teeth on each jaw were large and presented the same appearance that a lamb does when first born. The eyes were large and circular and looked just like a sheep's eyes. A stump of a tail, about four inches long, extended out from the coccyx. Every few moments it would give a low, bleating cry, which sounded just like a young lamb. The body and limbs were those of a well-formed female child. On questioning the mother, she said she had a severe fight with a large, ugly "ram," when at about the fifth month of her pregnancy, and was very much exhausted, when she finally got over a fence, away from the ram; but she said she had never thought of it since, until she heard the child give a cry just like a lamb. The child died with convulsions on the third day.

If this is not strong evidence of "maternal impressions" let us hear of some.

L. L. Doty, M.D.

Mosiertown, Crawford, Co. Pa.

—Prof. Depaul tells a story from his clinical experience, of a poor woman, who, to all appearance, had succumbed to a uterine hemorrhage. Turning to the persons who surrounded him, he said, "This woman is dead." But to his great stupefaction the patient replied, in feeble voice, "*Pas encore!*" So little dead, indeed, was the poor woman, in spite of all appearances, that in three weeks she left the clinic, perfectly well.

News and Miscellany.

Effects of Race in the Causes of Death.

Dr. E. Snow, in his May Report as City Registrar of Providence, gives a table showing how race affects the causes of death.

The following shows the number of decedents, according to parentage, from several prominent causes:—

	Am.	*For.*		*Am.*	*For.*
Apoplexy	5	5	Whooping Cough	3	1
Brain, diseases of	10	1	Hydrocephalus	5	1
Bronchitis	2	6	Liver, diseases of	0	3
Consumption	12	21	Pneumonia	3	10
Diphtheria	10	1	Scarlatina	3	5
Heart, diseases of	4	10	Tuberculosis	4	2

The population of Providence is, probably, about 45 of American and 55 of foreign parentage, in each 100; but from the figures just given of the number of decedents from different causes, it would be difficult to imagine that any such proportions existed in the living population. It is evident that a very great difference exists between the American and the foreign population, according to parentage, in the proportions of deaths from different causes, and this fact illustrates the importance, in this country, of the classification of vital statistics according to the parentage of the population.

Inquiries about "Mother's Marks."

Dr. F. J. Baker, of Lockport, New York, will be glad to receive information touching on the following queries:—

1st. Have any cases come to your knowledge or observation, of fœtal deformities or "marks" attributable to mental impressions on the mother during pregnancy?

2d. Have you any knowledge of cases tending to establish the doctrine of materno-fœtal symmetry, bearing particularly on ante-natal education?

Division of Labor.

This, says the *Canadian Journal of Medical Science*, is becoming fashionable of late in Toronto as well as other places. In the latest case coming under our notice, a celebrated clairvoyant is looking after the internal economy, putting in some new apparatus (a pair of lungs at present, we believe), while a surgeon is treating hemorrhoids in the same patient. The clairvoyant in giving the surgeon simply the anus to manipulate, is allowing him rather a short hold.

Cremation of an Italian Professor.

Dr. Ferdinand Colletti, Professor of Therapeutics at Padua, who was one of the early champions of cremation, died recently, and was cremated at Milan, with high honors.

Inquiries about Phthisis.

Dr. Edward Playter, Toronto, Canada, has printed a circular containing a series of inquiries in reference to tubercular patients, his object being to arrive at a closer definition of the cause of tubercular phthisis than we now have. Any physician who will aid him in this investigation may receive a copy of the circular by addressing as above, and will confer a favor on Dr. Playter by doing so.

Registration in Pennsylvania.

A convenient form of registration has been adopted by the Prothonotary of Cumberland County. As uniformity is desirable, this form is recommended by Dr. Sibbet to the consideration of the several Prothonotaries, and to the profession. Copies may be obtained by addressing Dr. R. L. Sibbet, Carlisle, Pennsylvania.

Personal.

—Dr. De F. Willard has been appointed surgeon to the Presbyterian Hospital, in place of the late Dr. H. Lenox Hodge.

—Dr. Gregory, of Fredericton, N. B., was thrown from a carriage Tuesday, and died of his injuries last week.

Items.

—It was a doubting patient who said, "Doctor, are these pills square?"

—Over one thousand medical men have already expressed their intention to be present at the International Medical Congress, in London.

—A cow in Rochester, N. Y., is sick with what is believed to be spontaneous cow-pox, and the case is watched with interest by some of the physicians of that city.

—Although Littré was baptized in his last moments, *Le Progrès Médical* states that his disciples have united to form a society to continue "positive religion," whatever that may be.

—The mortality from plague in Mesopotamia continues heavy. Alexandrian authorities deny its presence in Egypt, but can they be believed? Medical men in official positions are often asked to tell lies "in the interest of the business community."

—A French barber, referring to baldness and the credulity of people respecting the efficacy of hair tonic, says: "During the past twenty-five years that I have practiced the profession of hair dresser, I have made the trial, upon different bald heads, of more than five hundred different hair tonics, and I am bound to admit that I never saw a single head the hair of which was restored after baldness."

—The Cincinnati *Gazette* takes a gloomy view of the bibibles in that city. It writes: But are liquors poisoned? Of course they are. Four-fifths of all the liquors drank in Cincinnati, including wine, beer and cider, are poisoned. And these poisons are not confined to common drinks, such as whisky and beer; they extend to the aristocratic drinks that are most costly. The French wines are nearly all adulterated and contain poison. They are not real wines, but imitations.

—The officers for the ensuing year in the Iowa

Union Medical Society, are the following:—President, Dr. J. M. Armstrong, Lisbon. First Vice President, Dr. M. Meredith, Vinton. Second Vice President, Dr. Geo. P. Carpenter, Cedar Rapids. Secretary, Dr. Edwin Burd, Lisbon. Treasurer, Dr. H. W. Sigworth, Anamosa. Board of Censors, Drs. Edwin Blakeslee, J. McMorris, and E. M. Smith. Committee on Ethics, Drs. J. W. Lagrange, J. S. Love, and J. M. Ristine.

—The lady physicians are all the time gaining points. The Society of Medical Practitioners, of St. Petersburg, at their meeting of May 2d, decided to admit medical women to the membership of the Society. In London, the number of students in the London School of Medicine for women this past winter reached to the respectable figure of eighty. There are at the present time forty-two female medical students at the Paris faculty. Eighteen of them are English, eleven French, ten Russian, and three are our own beloved countrywomen.

OBITUARY NOTICES.

—Dr. Joseph Barnard Davis, the distinguished craniologist, died May 19th, in his 80th year, in Staffordshire, England. He had collected, probably, the largest private museum of craniology in existence. As far back as 1867, when he wrote his well known *Thesaurus Craniorum*, it numbered over 1700 specimens. It has now been transferred to the College of Surgeons, London.

QUERIES AND REPLIES.

Chronic Colitis.

MR. EDITOR.—In reply to Wm. H. C., Ill., I would ask him to try tannin, in five-grain doses, after each operation on bowels, in syrup; or, try sugar of lead in two-grain doses, in syrup, after each operation, for a few doses, with a sixteenth of a grain of acetate of morphine. But I should rely mainly on the tannin.

Portsmouth, N. H. N. L. FOLSOM, M.D.

MR. EDITOR.—I would recommend that Wm. H. C. administer subnit. bismuth, tannin and Dover's, in capsules, *on an empty* stomach, in his case of chronic colitis, in the hope that he will get the local action of these drugs approximately near the seat of the lesion.

Greeley, Col., June 10th, 1881. G. LAW, M.D.

MR. EDITOR.—In answer to Wm. H. C., of Ill. (case of chronic colitis, in No. 24), would suggest the trial of the following prescriptions:—

℞. Tr. capsicum,
Tr. myrrh,
Tr. catechu,
Tr. opii. aa f.℥ij
Tr. Jamaica ginger, q.s. f.℥iv. M.

SIG.—Teaspoonful in half a glass of sweet milk, three or four times a day.

Or—

℞. Ext. nuc. vomicæ, pulv., gr. xxiv
Ext. opii, pulv., gr. xxiv
Cupri sulph., pulv., gr. xij
Ext. gentian, q.s. M.

Fiat mass et divide in pil No. xlviij.

SIG.—One pill morning and evening, till checked, then once daily. J. W. BARD, M.D.

Ohio.

Question in Ethics.

MR. EDITOR.—A. and B. are physicians of the same town. A. is consulted and prescribes for a child, (which he had attended in other sicknesses), arranging with the father to report to him (Dr. A.) on the day following. The child is better the next morning, but toward evening becomes worse, and they send for Dr. A. Dr. A. being away, they call in Dr. B., who prescribes and gives directions for the *further management* of the case. Dr. A. comes home, and being informed of the matter by the father, resumes charge and treats the case according to his own judgment. On the next evening (child much better) Dr. B. calls, in the absence of Dr. A., without having been sent for, inquires about the case, and is angry because *his* directions were not obeyed in full, criticising Dr. A.'s treatment. Did Dr. B. violate the code of Medical Ethics? J. L. M.

Pennsylvania.

Ans.—It is evident that the patient was under the care of Dr. A., and that Dr. B. violated professional propriety in acting as represented.

Muscular Rheumatism.

MR. EDITOR.—Will a reader of the REPORTER please suggest a reliable course of treatment in muscular rheumatism, both acute and chronic. "H."

Iowa.

MARRIAGES.

BAXTER—MURPHY.—In Muscatine, Iowa, by Rev. Father P. Laurent, June 1st, 1881. W. H. Baxter, M.D., of Wilton, Iowa, and Annie C. Murphy, of Muscatine, Iowa.

LITTLEFIELD—CRAIG.—On Thursday, May 12th, at St. Michael's Church, Germantown, by Rev. Wm. Ely, assisted by Rev. J. K. Murphy, J. Dana Littlefield, M.D., of Boston, Mass., and Caroline Grey, only daughter of the late Morgan Craig, of New Brighton, Pa.

NEWTON—ECKERT.—On Wednesday, June 1st, at Paterson, N. J., by the Rev. Edwin B. Russell, Dr. William K. Newton, of Paterson, and Miss Harriet Eckert, of Ridgewood, N. J.

RICHARDSON—THOMAS.—On Wednesday evening, May 18th, at the residence of the bride's parents, No. 1 Bedford Ave., Brooklyn, N. Y., by the Rev. A. H. Partridge, Rector of Christ Church, George W. Richardson, M.D., of New York city, and Laura Isabelle, daughter of Joseph R. Thomas, Esq.

SMITH—ARCHULETA.—At James Hot Springs, New Mexico, April 25th, 1881, by Rev. J. M. Shields, M.D., Mr. James A. Smith and Miss Cayitana Archuleta.

SMITH—ZOGBAUM.—On Wednesday, June 1st, at the West Presbyterian Church, by the Rev. Dr. Hastings, St. Clair Smith, M.D., and Kate, daughter of Ferdinand Zogbaum, all of New York.

TANTUM—WILLIAMSON.—In Penn's Manor, at the residence of the bride's father, May 4th, 1881, by the Rev. Elijah Lucas, James D. Tantum, M.D., of Trenton, N. J., and Ella, daughter of Mr. Jesse Williamson, of the former place.

THOMAS—CUMMINGS.—On Wednesday evening, June 1st, at the residence of the bride's parents, No. 277 Bellevue St., Newport, Ky., by the Rev. W. M. Pettis, Dr. D. C. Thomas and Miss Nettie Cummings, both of Newport.

TROWBRIDGE—POLHEMUS.—On Wednesday, May 25th, at the Burlington, No. 30 West 30th St., by the Rev. Dr. Wm. F. Morgan, George Trowbridge, M.D., and Theodora, daughter of the late A. D. Polhemus.

VANCE—MEGARGEL.—At Bloomsburg, Pa., May 5th, by Rev. Stewart Mitchell, D.D., William T. Vance, M.D., and Alice Megargel, both of Orangeville, Pa.

DEATHS.

NICOL.—In Zurich, Switzerland, March 28th, 1881, of pneumonia, Rachel J. Nicol, M.D. (Class of 187-, Woman's Medical College of Pennsylvania), aged 32 years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1271.] PHILADELPHIA, JULY 9, 1881. [Vol. XLV.—No. 2.

Original Department.

Lecture.

CHRONIC FOLLICULAR ENTERITIS.

Delivered at the Hospital of the University of Pennsylvania, May 1st, 1880,

BY WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

This lady's case is one of long standing. I bring her before you in connection with the case of the man who insisted that he had a snake in his stomach, in consequence of having from time to time passed membranous casts from his bowels. A case of obstinate dyspepsia with membranous enteritis. I told you I would have a few words to say in regard to these different types of chronic bowel trouble. I do not know that they could be gathered together under any one name, but I shall show you illustrative cases of each type, and so you will get an idea of them all.

Let us take, for instance, this lady; a case of chronic follicular enteritis. She is 56 years old. She has resided in the South, but there is no reason to suspect much malarial trouble. She has suffered severe reversals of fortune. She has always been of a nervous temperament, and this has been aggravated by the circumstances to which I have alluded. An indulgent husband, who has humored all her whims and done all he could for her, has gradually brought about a condition of excited nervous sensibility, which, at times, almost amounts to hysteria. She has now gained considerable control over herself. The menopause occurred at the age of fifty.

Two years and a half ago her general health began to fail, she lost flesh, grew pale and weak, and had light attacks of catarrhal diarrhœa. This is quite a common history. There is a slow breaking down of the general health, gradually the power of resistance being reduced and the general health lowered; the system becomes so sensitive that after a little exposure to cold or damp, after eating some indigestible article of food, there will be a profuse secretion and a little diarrhœa. These attacks at first last only a few days and do not come very frequently, but as the system becomes more and more broken down the tendency becomes more and more marked, until there is produced a condition of almost constant diarrhœa. We find a progressive failure of general health, and with this the development of this morbid sensitiveness of the nervous system.

The diarrhœa takes different forms; sometimes it remains simply a flux; a discharge too frequent during the day, sometimes containing portions of food, but not containing mucus or bile or any evidence of ulceration. The diarrhœa may last in this way for many years, ten, fifteen, twenty years, without any evidence of intestinal ulceration. Simply a state of chronic catarrhal inflammation with enlargement of the follicles and weakness of the muscular coats of the bowel.

In other cases we find that ulceration ensues, and when these fresh attacks occur there are fresh crops of little ulcers. In such cases there will be a little discharge of blood in the stool and the microscope will show crystals of hæmatin and broken down corpuscles.

In other cases we do not have blood, but mucus. It is not necessary to have ulceration in order to have mucus, for we all know there may be a profuse discharge of mucus from the nose

or throat without any ulceration; but the follicles of the mucous membrane of the bowel are very prone to become enlarged, and if the disease is of long duration there is reason to think that small ulcers have formed.

In some cases the patients pass plugs of false membrane. They will tell you that they occasionally pass something like a skin. What our other patient thought was a snake was one of these membranous flakes. You see in these bottles specimens of these plugs. Perhaps most commonly they are in the form of casts of the intestine. I have seen them fifteen inches in length and large enough to be put over my thumb. More frequently they are not so large as that. In other cases they are solid plugs. I have now a case under treatment in which solid plugs are passed which are about three-sixteenths of an inch in diameter and three or four inches long. I know of no portion of the bowel from which they could come except the vermiform appendix.

In these cases of membranous enteritis there must be some spot of the bowel where the follicles are enlarged and are secreting a thick, glutinous material, which slowly undergoes a low degree of organization. I have had sections of these made, and I have found them to be fibro cellular in character, with blood vessels passing into them, so that Dr. Formad has been able to trace newly formed vessels passing from the intestinal loops into these plugs.

In all these cases the general health fails, the patient loses flesh, becomes anæmic, and there is a marked loss of tone, so that the patient becomes excessively sensitive. This condition is nearly always associated with a high degree of a nervous element, so much so that I have seen intense spinal tenderness, exaggerated reflex excitability, depression of spirits, hysterical attacks, and attacks almost epileptiform in their nature, in these cases of long standing bowel trouble, particularly when there has been ulceration or the formation of this membrane.

To return to our patient. In this case her health had become thoroughly broken down by these attacks of diarrhœa, which at last became chronic. With this there was evidence of ulceration, I think, of the lower bowel. There was tenesmus, the passage of blood, mucus and occasionally membranes.

There has been here the most marked evidence of relapses, which have been brought on from time to time by the most trifling causes, and we cannot treat these cases with any hope of success until we grasp fast hold of this idea. This is not a chronic disease whose lesions are incurable, but it is a condition of the system in which the local lesion is unable to get well, because, from time to time, by the most trifling causes, fresh attacks are produced, which attacks make the patient weak, increase the local lesion and put the patient back. The degree to which this sensitiveness becomes developed is almost inconceivable. I have frequently seen such patients so sensitive that they could not put their bare foot or leg outside of bed in the morning and keep it there a minute without immediately having sharp pain in the abdomen and a fresh attack of diarrhœa; but if they put on their stockings and drawers before getting up, they will escape the diarrhœa. I have seen the same diarrhœa produced by the patient passing from a temperature of 70° to one of 60°. I have met with a score of cases which I was not able to cure until I got down to these minute details of practical life; and until you grasp this truth you will never get your patient well. No drug, no diet will alone cure these patients. You must associate with it an attention to details the most minute, the most laborious, and the most troublesome that I have ever met with.

These patients generally go the rounds of all the doctors in town. They go to one, get a little better, but soon a fresh attack comes, and they are as bad as ever. I began to treat this patient in the same half-hearted way. She got better, and then worse. I tried again, with the same result. I then told her that she would have to come to the hospital. There is no use dallying with these patients, for unless you begin and treat them thoroughly and radically you do them no good, and you lose credit.

She is now better than she was before she came into the hospital, but the treatment has been about the same as it was before she came, except that there has been more attention paid to general hygiene and the avoidance of disturbing causes. What is true of this case is true of all this sort of cases, and if you do not adopt this principle of treatment now, you will learn it by years of failure and worry over these patients.

Now as to the treatment: the condition being a complex one, in which there is loss of tone and power of the skin and of the nervous system, a state of muscular debility, and this condition of chronic inflammation of the mucous lining of the gastro-intestinal canal, our treatment must be addressed to the relief of these elements.

In the first place, as you will have gathered

from what I have said, I consider rest, seclusion and good hygiene as the basis of all successful treatment. Such patients must be kept in bed, either continuously or the greater part of the time, and allowed to get up for exercise under proper restrictions, on good days, at a certain period of the day, and for a definite length of time. Secondly. Here, as in the treatment of all chronic diseases, you must try to restore the tone of the skin. The more I labor to cure chronic diseases of the mucous membrane, the more am I impressed with the dependence of the mucous membrane of the gastro-intestinal canal, the internal skin, upon the external skin. There fore, in these cases we use regular frictions, sponge bathing or inunctions, as we think best.

In regard to internal treatment: here, as in all mucous affections, diet is the most important element. It was only to day that a man brought his son to me, in the last extremity, worn to a shadow, and so exhausted that his recovery is problematical, with chronic intestinal inflammation, ulcerative in its character. He had received excellent medicinal treatment, but his diet had been entirely neglected. He had received half a grain each of nitrate of silver and opium, three times a day, with broiled fish for breakfast, and as many apples during the day as he wished to eat. There is absolutely no use of medicinal treatment in these cases, unless it is associated with a thoroughly correct diet. This should consist of such things as lean meat, scraped, stale bread, soft-boiled eggs; some prefer milk, buttermilk or skim-milk, others, the farinaceæ, as arrow-root, granum, or some of the other prepared starches. There is another preparation which often does exceedingly well; that is a mixture of oil and milk. The old-fashioned way was to take one-half a pound of mutton suet, put in one quart of milk, and boil to a pint, with constant stirring. So much of the suet as rose to the top was skimmed off and taken warm. This can often be digested where cod-liver oil cannot be. It is, perhaps, an old woman's remedy, but I have known persons with chronic enteritis cure themselves by taking it for a long time.

This item of food in chronic bowel troubles should be based upon the following principles: First, the food should be given at short intervals and in small quantities at a time; secondly, it should be of such a character as experience shows that the patient can perfectly digest.

We then come to medicinal treatment. We should attempt, in the first place, to allay the ir ritation of the mucous membrane. In many instances, as here, we obtain much better results from the injection of nitrate silver into the colon than from drugs by the mouth. In many of these cases the disease must be very low down in the sigmoid flexure, for injections of half a pint of thin starch-water, containing a small quantity of nitrate of silver, will produce a palpable effect. Here, weak injections will often do great good, and I warn you against beginning with strong injections. My own rule is to begin with one-fourth of a grain of nitrate of silver to the ounce, and slowly increase it until I reach the tolerance of the bowel, which is different in each case. When there is evidence that the upper bowel is affected you may give, by the mouth, nitrate of silver, guarded with a little opium, associated with the extract of nux vomica.

I found at the last examination, that although the men were well prepared on all the subjects, yet some of them could not write prescriptions, because they had had no practical instruction in this branch. I propose, therefore, to write prescriptions on the blackboard, in order that you may become familiar with the proper combination of drugs and the proportioning of doses; but I beg that you will not copy them, for I do not believe that one man's prescriptions are good for another man's case.

If I wished to give nitrate of silver in this case I should combine it as follows:—

℞. Argenti nitratis,
Pulv. opii,
Ex. nucis vomicæ, āā gr. v.
M. et. ft. pill. No. xxx.
Sig.—One after meals.

The nitrate of silver may be given until gr. xxx have been taken.

Another good remedy, and one which I have used with success with this patient, is small doses of the sulphate of zinc, gr. $\frac{1}{8}$ to $\frac{1}{6}$.

There is often acidity in these cases, with heart-burn, and creasote associated with an alkali is often a valuable combination in the treatment of these chronic bowel troubles.

℞. Creasoti, gtt viij
Bismuthi subnitratis,
Cretæ preparatæ, āā ʒj
Acaciæ, q s.
Tinct. cardamomi comp., f. ʒ ss
Aquæ, q.s. ad f. ʒ iv.
Ft. mist.
Sig.—Dessertspoonful three or four times a day, in water.

I leave sugar out of these prescriptions. With this I should give a little opium, according to the number of the stools, either the deodorized tincture or chlorodyne.

These are samples of the sort of drugs which,

joined with diet, hygiene, rest, and perhaps injections, will greatly relieve these cases; but I consider the most important treatment to be the general management of the case.

A word in regard to this exaggerated nervous sensibility. At one time it became so intense that I tried the application of the actual cautery over the solar plexus. This had an excellent effect over both her physical and moral condition. I told her that when she showed the same nervousness I should have to resort to the same treatment. This seems to have had a very soothing effect.

Communications.

CONCERNING TWO CASES OF PERFORATION OF THE MEMBRANA TYMPANI FROM ASCARIS LUMBRICOIDES, WITH REMARKS UPON THE CURIOUS HABITS OF THIS HUMAN PARASITE.

BY CHAS. S. TURNBULL, M.D.,

Chief Assistant to the Aural Department at the Jefferson Medical College Hospital.

(Read before the Alumni Society of the Auxiliary Department of the University of Pennsylvania.)

While looking over the December number of the New York edition of the London *Lancet*, my attention was called to the report of a "Case of Perforation of the Membrana Tympani from Ascaris Lumbricoides," by Lewis W. Reynolds, M.R C.S.ENG. I turned, and with mingled emotions of curiosity and skepticism commenced to read as follows:—

"On March 3d I was called to see a woman, aged thirty five, three or four months advanced in pregnancy. She was in a low nervous state, and had been suffering since Christmas from nausea and vomiting. About two weeks before she had vomited several round worms, and about the same time suffered severely from dyspnœa, and intense pain in the chest and abdomen. Shortly before my arrival she had vomited two, and three more discharged from the nostrils, her nose bleeding first for three hours. I prescribed four grains of santonine powder, to be taken at bedtime; after taking which four worms were passed per rectum, for the first time. The santonine was followed next morning by fifteen grains of compound scammony powder, when a great many more were passed per rectum. Three or four hours after taking the second powder, and having previously suffered all night from intense earache, a neighbor discovered a worm protruding from each ear and both ears bleeding; the same day three others came away from the ears, two from the left and one from the right. The following morning, March 5th. her husband drew another from the ear, and again on March 8th; this last was four inches long, with the diameter of a small goose-quill. A large number were also discharged each day by the bowel, making in all seventy-four.

"On March 10th, and again on March 13th, my patient vomited a large quantity of dark blood, and complained at the same time of a feeling of tenderness in the abdomen, for which I gave demulcents.

"On March 17th, in the evening, I was called to see her, and found her perfectly insensible, having been so since midday; the temperature was below normal, but with a fairly good pulse; she was roused again about midnight. The attack appeared to me hysterical. From this time she has gradually improved in health, but has had occasional attacks of diarrhœa.

"May 12th. For the last few days blood has trickled from her ears and down her throat, which she coughs up. On examination with the auriscope, there is now, as there was in March, excoriation of either meatus, and a large perforation of both membrana tympani, but the sense of hearing is very little impaired.

"*Remarks.*—The history of this case appears at first almost incredible; but there can be no doubt the membranes were perforated by the passage of the ascarides. In addition to being vomited, some must have crawled up the œsophagus into the fauces, thence some found their way into the nasal passages, and others into the Eustachian tubes, perforating the tympanic membranes, and being discharged by the external auditory meatus."*

High Wycombe, Bucks.

I considered the character of the medical journal, nor did I forget the title of the gentleman who was responsible for the facts of the case, which I was disposed to consider as illustrative of one of those curious hysterical manifestations accompanying certain female diseases. I thought these parasites might have escaped from the body and have crept into the external auditory meatus, or have been placed there by the patient to deceive her medical attendant. I have removed roaches, bed-bugs, and other parasites, to say nothing of other curious foreign bodies, from the ears of hysterical patients; hence my reason for suspicion. As I approached the end of the first paragraph I paused to re-read, thinking I had made some mistake; but when I read "this last was four inches long, with the diameter of a small goose-quill," I came to a full stop. Continuing, and reading Dr. R's remarks upon the case, I mentally agreed with him in considering that "the history of this case appeared at first most incredible."

My first impulse was to write to the editor of some medical journal, and express my doubts as to the genuineness of such a novel case. Second thought, usually the best, decided me to write to Dr. R., and ask him if he was really in earnest, whether or not he would be responsible for the facts of the case as reported, and stated

* The London *Lancet*, New York, December, 1880.

that, in my opinion, such an auro-parasitic demonstration was a "physical impossibility." Fearing I would not hear in time to report before this Society, I wrote a second time to Dr. R., and his prompt reply speaks for itself:—

High Wycombe. Bucks, England,
March 1st, 1881.

My Dear Sir—I beg to acknowledge receipt of your communication. The case as reported by myself in the *Lancet*, on Oct. 23d, 1880, is certainly remarkable. The parasites were round, with fine transverse marks, tapering at either end, four inches long, with a corresponding diameter, which I described somewhat vaguely as the size of a small goose quill; but they were very much the diameter of a large sized Eustachian catheter (perhaps rather larger); but then I must ask you to remember that this was in the dead, contracted state.

To my mind, considering the elastic nature of these parasites and their ability to lengthen out in squeezing through a small aperture, there is no reason to look on the case as a "Physical Impossibility." I regret now I did not examine the parasites microscopically, but am certain they were ascaris lumbricoides. Trusting this may convince you, believe me, my dear sir,

Yours truly,
Lewis W. Reynolds.

P.S.—Since my case you may not have seen a similar case reported in the *Lancet*, on January 8th, 1880, by Dr. Dickson; but as it is in the small print and may not be republished in New York, I enclose the extract:—

Extract from the *Lancet*, January 8th, 1881.

ESCAPE OF WORMS BY THE EXTERNAL MEATUS.

To the Editor of the Lancet:—

Sir—A few weeks ago I saw a case reported in your journal, of rupture of both tympanic membranes by the common round worm, the worms making their escape, one by the right the other by the left external ear. I have had lately a somewhat similar case under my care, in which the right tympanum was ruptured, giving rise to a good deal of hemorrhage and slight deafness, the worms, three in number, escaping by the external meatus. Yours truly,

(*Signed*) Jno. Dickson, M.B.
Bedford, Hull, Dec. 14th, 1880.

March 2d. Since writing the above I have received your second letter. The following history may be of interest to you: three months previous to the passage of the worms my patient suffered from deep-seated pain and cracking sensation in the ears. This was relieved by a purulent discharge from the external meatus, and at the same time, a spitting up of a similar discharge. This had a very bad smell and a bad taste; she has had bleeding from the ears, at intervals, up to the present time. With the otoscope can be seen in the right ear an oval aperture, puckered edges, and stained dark, from the hemorrhage; a loud ticking watch can only be heard close to the ear; as regards the left ear, evidence of perforation is still present, but the edges are in closer approximation than in the other. A watch can be heard half an inch off. I have not a specimen of the worms now, having thrown them away after keeping them some time. I must thank you for your courtesy in writing to me, and at the same time would be much obliged if you would inform me what conclusion you arrive at. Any further information I can give I will, with pleasure. Yours very sincerely,

Lewis W. Reynolds.

Chas. S. Turnbull, M.D.

Feeling an unusual interest in the cases reported, I availed myself of the experience and ever ready assistance of Prof. Joseph Leidy, M.D., to whom I submitted the printed account and the correspondence thereon. He assured me that, although it was a unique case, he thought it quite possible, because of the wonderful power of the ascaris lumbricoides to insinuate and force itself into small apertures and narrow passages. He referred me to a post-mortem specimen* now in the museum of the Medical Department of the University of Pennsylvania, deposited by the late Prof. W. Gibson.

In the discussion which followed the narration of these cases, Prof. Andrew J. Parker, M.D., said, "the worm in question displays a marked tendency to creep into small apertures, occasionally finding its way into the gall duct, gall bladder, hepatic and pancreatic duct, giving rise to various lesions. It also passes along fistulous tracks to the bladder, spleen, kidneys, spinal cord. Again, it may find its way into the glottis, trachea, lungs, etc. It is also found in the contents of abscesses, or fistulæ in the walls of the abdomen, having, no doubt, in some such instances, caused the trouble. Cases have been recorded where it has become fixed and strangulated in the eyes of buttons and similar objects, and this fact has suggested the administration of such articles in order to act as worm traps."

Dr. Harrison Allen said, "during my term of service in Washington, during the war, I remember seeing in the Patent Office a model of an apparatus for trapping lumbricoid worms. As I recall the model, it consisted of a tube, fashioned somewhat like a 'Planten gelatine capsule.' An opening was seen on the side, which was continuous with a perforation extending through the short diameter of the tube. A concealed spring occupied one end of the interior of the apparatus and was armed at one end with a number of sharp teeth. The outside of the model was provided with a small ring. A long string was tied to this ring. I inferred, from my inspection, that the instrument was used in the following man-

* A liver of a child, containing a number of long, round worms (ascaris lumbricoides), packed in the biliary ducts.

ner: The spring being set the apparatus was swallowed by the patient, the string hanging from the mouth. The worm, having thrust a portion of his body through the opening, caused the spring to recoil and the teeth of the trap to pierce the worm and entrap him; the string was then to be used in withdrawing the trap and worm. These are my impressions of an instrument not seen since 1863."

Other members of the Society expressed themselves as having either seen or heard of cases in which this worm had been trapped in the apertures of small foreign bodies (such as buttons, etc.), accidentally swallowed.

In looking up the literature pertaining to this parasitic worm, I first consulted my copy of "Cobbold's Parasites, etc." * (a volume which, by the way, I think ought to be in every physician's library), and there found much of unusual interest, even to those not interested in helminthology. Excellent articles will also be found in Meigs and Pepper's, Dewees' and Condie's works on Diseases of Children. I have quoted extensively from Cobbold, in order to better acquaint medical men with many facts which are not generally known, not only as pertaining to the habits of the ascaris lumbricoides, but also to the symptoms it produces, hoping, by so doing, to awaken interest in the subject.

The parasites of the human body are, as a rule, not sufficiently understood by the profession generally, and many alarming and varied morbid phenomena, as well as their fatal issues, are to be ascribed to the presence of some form of parasite which, either by direct or reflex irritation, misleads, or baffles the skill of the professional adviser.

Cobbold † says this common parasite Ascaris lumbricoides, "Linneus," was for a long while regarded as identical with the great lumbricoid of the horse, but the question has been finally settled by Schneider, who has shown the two to be quite distinct. The large lumbricoid found in the ox belongs to the human worm. Our large human helminth resembles the common earth worm in general appearance only. The males usually measure from four to six inches in length and the females ten to fourteen inches. Some have been reported up to eighteen inches in length. The body is smooth, fusiform, and elastic, and marked by numerous fine transverse rings. It is attenuated toward either extremity, the anterior end terminating in a prominently three-lobed mouth. The tail is bluntly pointed. *Notwithstanding the advantage which the size of this entozoon affords us in the matter of observations and experiments, we are yet ignorant as to the precise mode in which the young gain access to the human body.* From what has been noticed respecting the growth of the ascaris of the dog and hog, we know that the worm requires but a short time to pass from the larval to the sexual state. The views of Hering, Mosler, Davaine, and others, who suppose that these worms are reared in a direct manner by swallowing the ova, is, as Leuckart observed, not yet proved. We are in full possession of the facts of larval development.

When these worms first gain access to the human body their size is quite insignificant. At the post mortem of an imbecile Heller discovered eighteen young worms, ranging in size from about one ninth to one-half an inch in length. The eggs of the ascaris lumbricoides have been kept alive by Dr Davaine for a period of more than five years. I have myself watched the development of their contents *in fresh water*, through all the stages of yolk-segmentation, up to the stage of an imperfectly organized, coiled, intra chorional embryo, and have kept them in the latter condition for a period of three months.

In this connection I will only add, that if the present position of the question be such as I have here represented it to be, we see that Mosler was not far wrong when he suggested that contamination of the drinking water with the eggs out of privies is to be blamed as a source of infection. According to Heller, from whence I quote, Mosler actually demonstrated the presence of the eggs in water thus exposed. In like manner it becomes obvious that Davaine's practical remark (although it was based on the assumption of a direct infection by the eggs), that filtration will probably be sufficient to prevent infection, loses nothing of its hygienic value, Davaine holds that the comparative infrequency of this parasite in Paris is due to the free use of the filter. In London, though not uncommon, the worm rarely occurs in great numbers in one bearer. Heller states that these worms were found in 9.1 per cent. of post-mortems conducted at Dresden, in 12 per cent. at Erlangen, and in 17 per cent. at Kiel. He quotes Huss in stating that no one is free from this worm in Finland. Throughout India and the East they are extremely abundant, so also in the West Indies, Brazil, and in the Mauritius, in the low lands of Holland, and the lake districts of Sweden. The abundance of water is certainly not alone suffi-

* Parasites, a Treatise on the Entozoa of Man and Animals, etc. By T. Spencer Cobbold, M.D., F.R.S., F.L.S. etc., London, 1879.

† Loc. cit., p. 213.

cient to explain the frequency of the parasite, seeing that the most important factor is that which rests upon the uncivilized habits of a rural population. Krabbe and Finsen have testified to the fact that Iceland is the only country that is entirely free from ascaris lumbricoides. The number of worms present in any human bearer is usually small, varying, commonly, from six to eight. Cases in which scores or hundreds are found, are comparatively rare.

Küchenmeister mentions the case of one child who passed 103 examples, and of another child that harbored from 300 to 400 worms; Dr. Gilli gives a case where 510 were passed by a child, and Cruveilhier estimated that over 1000 existed in an idiot girl. Dr. Mackeith, by means of *santonine*, expelled from a little girl five and a half years of age 300 lumbrici, and Dr. C. Rose, by the use of the same drug, expelled 30 from a child *but* 15 *months old.* (Dr. Dewees says* he never saw worms in children under ten months old, and in only two instances at that age.)

The proper habitat of the lumbricus is the upper and middle part of the small intestine. From this situation it often wanders, and frequently gains access to the outer world, not only by the natural passages of the mouth, nostrils, and anus, but also, occasionally, in a more direct way *by perforating the intestinal* and abdominal walls. Many cases are on record where they have passed into the abdominal cavity; in other instances they have lodged themselves within the abdominal viscera and pulmonary organs. As regards the symptoms produced by lumbrici, these vary according to the situation they may occupy, modified by age and temperament. They give rise to colic, shooting abdominal pains, dyspnœa, nasal itching, nausea, vomiting, diarrhœa, epilepsy, aphonia, strabismus, mania, etc. Occasionally death supervenes suddenly."

"Meigs and Pepper† confess themselves inclined to believe, from facts stated by different authors, and from the history of two cases which occurred to M. Guersant, in 1841, at the Children's Hospital of Paris (*Biblioth. du Méd. Prat.* p. 680), that worms may in some instances cause a perforation independently of previous disease of the coats of the intestine. In one of these, two lumbrici were found engaged in an opening in the appendix vermiformis, half the bodies of the animals being in the appendix and half in the peritoneal sac; while in the other, an opening of the same kind as in the previous case was found in the appendix, and though the three worms which were found lying in the abdominal cavity might have escaped through an ulcerated perforation of the colon, it is not the less true that the opening in the appendix presented the same characters exactly as in the first case, in which the animals were, as the author remarks, "taken in the act." In both instances the perforation in the intestine was at the extremity of that canal, and in the form of a narrow opening, of a conical shape; the membranes were smooth, thinned, and the edges of the orifice sloped off from within, outward; no trace of anterior ulceration was perceptible."

At the German Hospital, in a post-mortem which I made this winter, in the case of a patient who died suddenly during the initial stage of typhoid fever, I found several small lumbrici in the distended, *but not inflamed*, vermiform appendix, but the small intestines were full of good-sized worms, which I had no doubt hastened, if they did not cause, the death of my patient. Lumbrici no doubt do great damage in all cases of acute enteric disease, and especially typhoid fever.

I wish in this connection to report two cases of unusual interest which occurred at the German Hospital in this city, as they serve especially to show the reflex phenomena of parasitic gastro-intestinal irritation. Dr. J. Solis Cohen, my colleague, who preceded me in the usual term of service, told me that Sarah P., aged seventeen years, was admitted to the medical wards as a typhoid-fever patient. She had a temperature of 106°, and a pulse of 136. A fever mixture was ordered, and as the bowels had not been opened for several days, a brisk purge was also prescribed. This within a short time caused to be expelled an ascaris lumbricoides, about twelve inches in length. In less than an hour the pulse and temperature were normal.

Last January there was admitted to my wards a young German, who, to all appearances, had been suddenly attacked in the full vigor of manhood, and without any apparent cause, with symptoms of an acute meningitis, concerning which I did not feel entirely satisfied. Having been compelled to use the straight jacket I ordered a purge and the usual treatment for such a case.

On making my visit the next day I was surprised to find my patient, who I thought might, perhaps, be dead, standing by his bed, to which he had been carried the day before, ready to plead for immediate discharge. A short

* Dewees, "Dis. of Child.," p. 481.

† Diseases of Children. 4th Edition. Philadelphia. 1870. p. 8:5.

time after having administered the prescribed purge of calomel and jalap, the nurse informed me that a lumbricoid worm, about fourteen inches in length, had been vomited, with instant relief to all the alarming symptoms, *i. e.*, violent delirium, a high fever, bounding pulse, stertorous breathing, a temperature of 105°, complete insensibility, etc. Cobbold * mentions a large number of most remarkable cases of lumbricoid eccentricities, some of which I have referred to in brief, quoting from his extensive and unique bibliography, p. 250.

Cases.—Boy, 15 years of age. Death due to pressure on the windpipe by a worm lodged in the gullet.

Epilepsy, produced by two lumbrici and one tapeworm.

Lunacy for eight years, by a single lumbricus (cataleptic fits lasting two and three weeks at a time).

Two cases of amaurosis in young girls, caused by lumbrici. (I have frequently cured apparently grave cases of amaurosis in children by santonine. T.)

Fatal enteritis, by 200 worms.

Eight fatal perforations (the eighth occupying the cavity of the pleura).

Cases of irritation of genito-urinary organs.

Occupying the biliary ducts and gall bladder.

Two perforations of the small intestine.

In abscess of abdominal parietes.

Expelled by a child who had swallowed the brass "eye" of a lady's dress; through the circular loop of this eye, used as a toy, the ascaris had partly thrust its body, become strangulated, and there perished.

Two lumbrici trapped in the eyes of buttons swallowed by the patient; and one worm, not content with a single strangulation, had succeeded in passing itself through two buttons.

In 1842, Mr. T. G. Stockbridge gave a similar case, in which he spoke of "hooks and eyes" as a new remedy or "worm trap" for lumbricus.

Other writers mention similar cases of mechanical expulsion of worms "by metallic buttons."

An open-topped thimble constituted another worm trap.

"Metallic suspender buttons" penetrated by lumbrici.

Two more cases of worms trapped, "with a dress hook attached."

Worms in the bladder simulating "stone."

Lumbrici causing pulmonary disease.

Discharged through male urethra.

* Loc. cit.

A large worm (lumbricus) in the windpipe, causing death.

Worms (lumbrici) evacuated at an ulcer in the groin.

Forty lumbrici cause fatal tetanus (traumatic) in a boy.

Lumbrici in the nose.

" " abscess of the liver.

" " stomach, causing dyspnœa.

" " pleura.

Lumbricus in the bubo of a woman.

Perforation of the stomach by lumbrici.

Lumbrici ejected from the nose and mouth, attended with hæmoptysis.

Escape of lumbrici from the navel of a child.

Lumbricus and tænia associated, with hæmoptysis.

Deaf and dumb child restored after discharge of eighty-seven lumbrici.

Stuttering occasioned by lumbrici, etc.

Ascaris lumbricus causing catalepsy and fits, lasting two or three weeks; cured by vomiting.

"Child *twenty months old*, extremely emaciated, abdomen enormously distended, and semi-transparent; rapid recovery after discharge of ninety-six lumbricoides, from ten to six inches long (under use of pink-root infusion*)."

"Cobbold states a most important fact of more than usual interest, when he mentions the presence of a *peculiar irritating vapor* which is given out by these lumbricoids, particularly when fresh. Several observers have noticed peculiar symptoms. Miram was attacked with sneezing, excessive secretion of tears, with swelling of the puncta lachrymalia, and Huber also experienced a troublesome itching of the hands and neck, after examining specimens of ascaris. In like manner I have myself had watery suffusion of the eyes; and in Bastian's case even spirit specimens produced irritation. The attacks of catarrh and asthma were so persistent and severe that they lasted for six weeks at a time. So sensitive was Bastian to the lumbricoid miasm, that he could not even put on a coat that he had worn during his investigations without experiencing fresh attacks of sneezing and other catarrhal symptoms. The attacks became periodical, occurring between five and six in the morning, being accompanied by dyspnœa and distressing spasmodic cough. Bastian, in short, was quite a martyr in the cause of nematode anatomy."

Küchenmeister† says, "*The worm* (*ascaris*

* Dewees, "Diseases of Children," p. 492.

† "Küchenmeister's Manual of Parasites, Sydenham Society's Translation, London, 1857.

lumbricoides) can never actually bore through the healthy intestine. For this it is rendered unfit by the structure of its head and its thin lips, which are certainly adapted for suction, but not for boring." He, too, mentions the peculiar "lumbricoid miasm," which seems to be secreted by the third and innermost layer of skin. Also that the parasite, even in immense numbers, causes no annoyance to its host unless disturbed by irritating articles of diet, or medicines given for the purpose of expelling the worms."

There is no doubt, in my mind, but that this peculiar "irritating lumbricoid miasm or vapor" causes local as well as reflex irritation, and in the stomach, as if by a wise provision of nature, acts as an emetic, since the majority of worms are expelled, per orem. Santonine, to be given at short intervals, is recommended by all authorities, who likewise insist upon purgatives after fasting, and Küchenmeister extols the santonate of soda and castor oil.

The notes of the following case were kindly handed to me by Dr. Wm. H. Bennett, of this city. The worm in this case no doubt made its escape through the membrana-tympani, in which no signs of a perforation could be found. The "few days" intervening were quite enough to obliterate the small opening made by the dilating process of the parasite, as well as remove all symptoms of inflammation.

"A. S., a healthy girl, was, during the first half of her eighth year, subject to occasional slight attacks of earache. When eight and a half years of age she had an attack of scarlet fever, which was not followed at the time by any ear trouble. About four months after her recovery from the fever she began to have occasional attacks of earache in the left ear, which continued without any treatment at the hands of a physician, for five months. At the end of this time she had a very violent attack, lasting several days. This was treated by instillations of warm oil and laudanum, and the external application of poultices. The pain was excruciating and seemed to be increased the first day by the use of the oil and laudanum, but on the second day it diminished. It was on this day that I saw the patient for the first time, but having no speculum sufficiently small with me, I was unable to do more than make an examination of the external portion of the meatus. Here there was no sign of inflammation, but the meatus seemed closed by swollen mucous membrane. During the whole of this day there was great itching, and toward evening the child called to her mother, saying that there was something crawling in her ear. Before her mother came to her she put her hand under the poultice and pulled something from her ear, which broke in two while pulling it. She then pulled the other half out of her ear.

"The two pieces were preserved and shown to me about twenty-four hours afterward. They were parts of a lumbricoid, apparently about two and a half inches long.

"The child had no further trouble with her ear, and has not had since (nineteen months).

"The withdrawal of the worm was not accompanied by any blood. The ear was examined a few days afterward by Dr. A. G. Heyl, who found no evidence of perforation.

"Under the use of santonine, her child afterwards passed a single lumbricoid per anum."

CASE OF IMPERMEABLE STRICTURE OF THE URETHRA, WITH RETENTION.

BY LOUIS BRECHEMIN, M.D.,

Assistant Surgeon, U. S. Army.

John E. J., corporal in a U. S. cavalry regiment, age twenty-eight years, married, had gonorrhœa in 1868, which was not successfully cured, leaving him with a gleet which lasted two and a half years. His first attack of retention was in 1876, while serving with his company in the field, and was twenty hours in duration. The second attack lasted sixteen hours and occurred in the summer of 1878.

On the morning of February 12th, 1879, he was again attacked with retention. Acting Assistant Surgeon Ralph Bell, U.S. Army, failed to relieve him by instruments that night. The next morning, February 13th, I saw him at his quarters, and a recourse to catheterization having again failed, the usual treatment for retention, by opium, hot baths, etc., was adopted, and in the evening ether was administered and a third unsuccessful attempt made to pass the instruments. During this time the overflow of urine was passing away by drops. The opium was ordered to be continued through the night.

On the morning of February 14th a fourth attempt at catheterization failed, it being impossible to pass the finest filiform bougie. His urine was still dribbling, but as the bladder was getting larger and more tense, and now reached fully up to the umbilicus, it was determined to perform external perineal urethrotomy without a guide, in the hope that this operation would relieve the retention and make a radical cure of the obstruction.

Accordingly, at 2 P.M., assisted by Dr. Bell,

the patient was put under the influence of ether, placed in the lithotomy position, the staff introduced against the face of the stricture and held in position by Dr. Bell. The parts were then shaved and an incision made, in the median line, into the urethra, against the point of the staff. Threads were introduced as recommended by Gouley and Van Buren, but the oozing of blood was so great and so obscured everything, that it was found impossible to introduce a fine grooved director through the stricture. All attempts at so doing having proved failures, and the hemorrhage still continuing, rendered it necessary to use Monsell's solution. Supra-pubic puncture of the bladder was then performed with a trocar, and thirty-six ounces of urine drawn off. A soft catheter was inserted into this wound and allowed to remain, and the testicles were supported by a suspensory bandage.

The patient reacted nicely from the ether; temperature, eight hours after the operation, 100°.

February 15th. Patient doing well; wound in perineum ordered to be syringed out alternately with carbolized water and solution of potass. permanganate, and lint soaked in carbolized water placed over it. Tr. ferri chlor., ter die; water passing freely from bladder by the catheter.

This treatment was continued up to February 22d, when the urine began passing by the natural channel.

February 26th. Catheterization attempted, but failed completely.

March 10th. Patient, being in all other respects in good condition, was allowed to go to his quarters.

March 13th. Complains of pain and swelling of testicle; an attack of epididymitis beginning.

March 31st. Still under treatment; epididymitis nearly cured; passes his urine freely. Wound in the perineum has closed.

April 6th. The epididymitis having disappeared, an attempt was made to dilate the stricture. A filiform bougie was introduced after some trouble, and over this a No. 5 Gouley tunneled instrument. The dilator was next passed and the stricture gently stretched so as to admit a No. 8 olive-pointed elastic bougie; 10 grs. of quinine and ¼ gr. morphia given; no urethral fever resulted.

April 13th. Dilator introduced and stricture forcibly stretched so as to admit a No. 12 (Eng.) solid bougie. No bad result followed.

April 15th. Patient returned to duty.

April 20th. Patient personally passed a No. 12 elastic catheter without difficulty; general health excellent.

Fort Meade, D. T., April 9th, 1881.

COMPLETE OUTWARD DISLOCATION OF THE ELBOW.

BY WILLIAM EKWURZEL, M.D.,
Of Philadelphia.

On January 1st, 1881, Joseph Larer, carpenter, aged forty five years, was working with another man on a temporary staging, about five feet high, nailing up the inside planking on the wall of a carriage house. The scaffold consisted of a one inch board, sixteen feet long, resting at each end on a frail support. Each man kept well to his own end of the board, lest, under their combined weight, it should break in the middle. Notwithstanding this precaution the scaffold, all at once, began to fall in a line parallel with the wall, but so slowly that Larer felt no alarm, thinking he would stand upright, and go down with it safely. The other man, just at this time, jumped to the floor to save himself, and in doing so greatly hastened the fall of the scaffold, and doubtless threw the plank into such vibrations that Larer lost his balance, and fell, he does not know how, but those who were present assert that the plank on which he had been standing fell across the left arm above the elbow. On examination, three hours after the accident, I found the left arm deformed in a remarkable manner, the ulna and radius resting on the external surface of the humerus above the external condyle, and the olecranon process projecting prominently backward, while the internal condyle and the articular surface of the humerus formed a marked prominence below, over which the integument was tightly drawn. The forearm was flexed at a right angle, was quite immovable and forcibly pronated, the dorsum of the hand looking backward, as if the ulna, instead of sliding, had been *rolled* into its abnormal position.

Standing at the side of and somewhat behind the patient's left shoulder, I grasped the arm firmly with both hands, and with my thumbs forced the dislocated mass downward, and had the gratification of feeling the displaced bones ride over the external condyle, and slip into place (as I thought), under the end of the humerus. Instead of having effected complete reduction, however, my efforts had converted it into the ordinary backward dislocation of the elbow, which I reduced in the usual way, at once obliterating all deformity and restoring perfect motion to the joint.

The resulting inflammation was not severe, and in twenty-three days the patient returned to his work.

In looking over some back numbers of the REPORTER, in search of other matter, I stumbled over a report, in the number for March 22d, 1879, by Winfred Wylie, M.D., house surgeon in the Long Island College Hospital, of a similar case, with an illustration of the deformity, from which I copy the following quotation:—

"The large majority of outward dislocations of the forearm are incomplete; indeed, only nine examples of a complete dislocation have been collected by Denner, including two seen by himself. Malgaigne has since added two more, making in all eleven cases. All these examples have occurred in the practice of French surgeons. So far as I am able to discover, no American or English surgeon has ever reported a single example."—*Prof. Frank H. Hamilton.*

~~HOSPITAL REPORTS.~~ Cases in Hospital Practice

~~BELLEVUE HOSPITAL MEDICAL COLLEGE.~~

CLINIC BY AUSTIN FLINT, M.D., New York

~~Professor of Principles and Practice of Medicine.~~

Hemorrhagic Diathesis.

~~GENTLEMEN~~—The case of anæmia from hemorrhage, which I showed you at a former meeting, is not progressing as favorably as we would desire. He had a tooth extracted, and the bleeding from the socket continued for some time before it could be arrested. After that he had hemorrhage from the nose, and yesterday the anterior and posterior nares were plugged. The plugs were removed this morning, but the hemorrhage returned again, and the nose had to be replugged. It is a good case illustrative of the hemorrhagic diathesis, which we hoped in this instance was acquired. But the patient now informs us that his brothers also have the same tendency to bleeding, so that it appears to be hereditary. I will not stop now to discuss the causation of the hemorrhagic diathesis, or to speak of the hereditary, the congenital, or the acquired forms, but would recommend you to read up what has been written on the subject. I am sorry to say, however, that you will not be able to find an altogether satisfactory explanation of the pathological condition. It was supposed at one time to be dependent upon a deficiency of the fibrinous constituents of the blood, but that has been disproved, and it is the prevailing impression now that it is due to some state of the terminal branches of the arterial system, rather than to the condition of the blood itself.

Bright's Disease.

The patient before you, gentlemen, is a substitute for one whom I had intended to present to you, but cannot, for the best of all reasons, viz., he is not in life to-day. It was a case of a complication of elements, one of which was an affection of the kidney. He had a thickened pleura, and some solidification of lung on one side. The object which I had in view in selecting that case was, to illustrate the way in which we are liable, without due care, to be deceived respecting the presence of liquid in the pleural cavity. That patient had marked flatness on percussion at the base of the chest, and there was also absence of the respiratory murmur, and from these two signs the natural inference at first would be, that there was liquid. There was none, however, as was shown by the introduction of the hypodermic syringe. I meant to have shown the case as illustrative of the importance of vocal resonance in preventing error of diagnosis; vocal resonance continued down to the very base of the chest, which was conclusive evidence that there was lung there, irrespective of the demonstration by the hypodermic syringe. In the absence of that patient the doctor has brought up this patient, whom I have not seen before, and to whose case we will devote only a short time. I will read from the recorded history:—

Samuel —, sixty years of age, a native of Ireland, a tailor, admitted on the tenth of this month; nothing important pertaining to his family history. His personal history is as follows: He has always been accustomed to the use of alcoholic beverages, sometimes taking them in considerable quantities. He had been drinking a large amount of beer for two or three days before his present illness, which commenced three weeks ago. The first thing he noticed was œdema of the scrotum and of the penis; then the legs and feet began to swell, and he became puffy about the eyes; he had considerable pain in the head, misty vision, spots before the eyes, and vertigo, also a feeling of great oppression at the stomach, with nausea, pain in the loins. He noticed that he passed less water than usual, that it was very dark, and had pain in the end of the penis during its passage. On admission, the lower extremities were œdematous, likewise, the scrotum and the eyelids. He complained of pain in the back, of loss of appetite, and a general feeling of malaise. Physical examination of the chest showed the lungs to be normal, the urine was amber colored, cloudy, of a specific gravity of 1.010, acid, and contained about ten per cent. of albumen, the whole quantity being twenty-one ounces. He was put upon the bitartrate of potash, and upon the infusion of dog-grass, or triticum repens, as a diuretic. On the 11th he passed twenty-four ounces of urine, and on the 12th, forty-eight ounces, so that the dog-grass seemed to have had some diuretic effect.

Such, gentlemen, is the history, and the first question which arises is: Is this an acute diffuse nephritis, or is it some one of the several chronic forms of renal disease? That is a question which often presents itself to us, both in private and hospital practice. The patient, as in this case, notices first œdema of the limbs, then œdema of the face, increasing more or less, and with that, loss of appetite, impairment of strength, some pain in the back, general de-

bility, the urine scanty, dark colored, smoky, and even black in some instances, the specific gravity usually high. Now, with the exception of the last fact, what I have just stated is a synopsis of the history of this case, and that group of symptoms points to acute diffuse nephritis; and if we are quite sure of that, and that there was no anterior affection of the kidney, we may always entertain a favorable prognosis, we may expect the patient to recover. There are some exceptions to that rule, but we have a right to expect recovery. We have also a right to expect that the acute will not be followed by a chronic form of the disease; but there are exceptions to this rule also. We did not see the urine when it was dark, as this patient describes it, for it loses this dark color after a while, and this patient had been sick three weeks before he entered the hospital. This dark color, by the way, is due to the presence of hæmatine, and sometimes the urine presents very distinc ly a bloody appearance.

In concluding that we have a right to infer that this patient has had an attack of diffuse nephritis, an important question beyond that is, did this attack of acute nephritis occur when the kidneys were healthy, or was it superadded to a chronic affection? This latter fact obtains not infrequently. There are two points in this case which have a bearing on that, and these two facts are opposed to each other. The low specific gravity, with the small quantity of urine which the patient made when he entered the hospital, are not very consistent with simple acute nephritic disease, and yet it would be wrong to base a positive judgment upon an isolated fact like that. So far as that goes it would rather tend to show that there was an old affection prior to the development of this acute affection. The other point is this, that the lungs are normal. If this patient had a chronic form prior to this acute affection, it probably was a fibroid or contracted kidney, which leads after a time to enlargement of the heart, without, of course, valvular lesion. If, then, we were to find in this case hypertrophy of the left ventricle it would be a very strong point as regards the prior existence of a chronic renal disease; and the fact that the left ventricle is not enlarged does not bear as strongly against chronic renal disease, although it has a certain amount of weight on that side. On examining his heart I cannot detect anything abnormal, so that we are justified in considering it probable that this is an instance of acute diffuse nephritis, which is progressing favorably under the use of simple diuretics, and if this view be correct we may look forward in a week to much more improvement in the patient's condition, expecting that the urine will increase in quantity up to the normal, be increased in specific gravity, that the albumen will be diminished, that the little dropsy which he now has will have disappeared, and that he will be improved in all respects.

Heart Disease.

It occurs to me, gentlemen, to mention some circumstances which relate to the diagnosis of functional disorder of the heart. I received a letter yesterday from a medical man who lives at a considerable distance, who is very anxious on the subject of disease of the heart; he said in his letter that he was about fifty years of age, and he had during nearly half that period been actively engaged in the practice of medicine; for ten years or longer he had suffered at times from an affection of the heart which rendered him very anxious; and for a long time he had been intending to come and have me examine his heart, but something prevented. Within the past few weeks the disturbance of the heart was very great. He wanted to know if it was possible for me to come and see him. I relate this circumstance with a view of impressing upon you two or three points. I have scarcely any doubt that that man is suffering from a purely functional affection of the heart. Why? Because he has had a disturbed action of heart, off and on, for a long time, and if that disturbed action were due to an organic lesion matters would have developed in a very decided way before this. Then he does not mention that he has any dropsy; he only mentions disturbed action of the heart, and some disturbance of the respiration. He also mentions that he has been a sufferer from dyspeptic ailments during pretty much all his professional life. In my answer to day, I told him he could settle the matter almost certainly himself, and in a very simple manner. If he found the apex beat in the fifth intercostal space, near the vertical nipple line, and the resonance on percussion equal, just without the nipple on the two sides of the chest, he might feel sure that his trouble was purely functional. Now, those are very simple points to ascertain. Anybody can ascertain where the apex beat of the heart is, and it is very easy to determine whether the resonance at the points indicated be equal. Now, why was I warranted in saying that? Because, if the resonance and the apex beat of the heart be found as stated, enlargement of the heart may at once be excluded; and if there be no enlargement of his heart, his trouble must be functional, even if we assume that there be valvular lesions, for valvular lesions do not lead to disturbance of any great amount until they have led to enlargement of the heart; and if, then, there were no enlargement of the heart, which would exclude any organic trouble, he would know that it was a functional disturbance, and need not worry. Thus I wrote him, and told him to try to relieve his dyspeptic ailments by tonic remedies, by taking good substantial diet, which is the proper treatment of dyspeptic ailments in general; to take a little wine, under scriptural injunctions, and for the reason given in scripture, and to get a little change of scene, without the annoyance incident to medical practice; and another very important thing, to put the heart as far as practicable out of his own mind, and never to feel of his pulse, or try to listen to his heart sound. I venture to say, that I shall get a reply by and by, saying that he is comfortable, easy.

Dysentery.

I shall detain you but a few minutes with our next patient, I am told that it is a case of dysentery, which is an important subject, being a common disease, and a good deal might be said about it, but we have other cases which we want to present, and our time is limited.

Her name is Sarah —, thirty two years of age, a native of Ireland, a domestic. Admitted on the 11th of this month, day before yesterday. She is a hard working woman, employed in a laundry, exposed to variations of heat and cold, and on the sixth of this month was taken with a severe pain in the stomach, followed by vomiting and passages of a diarrhœal character. The diet had been simple, containing nothing to which the symptoms could be attributed. The colicky pains soon became more severe; she lost her appetite, and suffered from a general feeling of malaise. The next day the dejections were more numerous and mucous in character, and accompanied by tormina and tenesmus, those two classical symptoms which are diagnostic of dysentery. Then the dejections became muco sanguineous, with almost constant desire to go to stool, although but a small amount was evacuated. You see the dysentery was preceded a day or so by diarrhœa, which is always the case, the diarrhœa lasting a variable length of time; then she had the characteristic stools, mucus and blood, or bloody mucus, accompanied by tormina, griping pains, and tenesmus, a sensation as if the rectum was full, giving rise to a strong desire to make effort at defecation— a sensation due, not necessarily to the presence of anything in the rectum, but to an inflamed condition of the mucous membrane.

She complained, on admission, of great prostration, of anorexia, of soreness and pain in the abdomen, together with the symptoms above described. The stools muco-sanguineous, sometimes almost pure blood. The temperature was 101°, the pulse 110.

This patient got half an ounce of whisky every two hours, and ten grains of the subnitrate of bismuth every three hours, and also tincture of opium, tincture of aconite, and the chalk mixture. During the night of the 12th she had five muco-sanguineous passages. She says she feels weak this morning. The above prescription was changed by increasing the opium at each dose, regulating the quantity by the effects upon the respiration. The respirations went down to seven a minute, when the medicine was stopped, and one ninety-sixth of a grain of atropia was given hypodermically, and gallic acid was given during the day. The next night the passages were diminished in number, being only three. The patient's appearance is better to day.

I would simply direct your attention to the treatment in this case, saying that I believe it is the correct one; and would add that if, by manipulation of the abdomen and by the character of the stools, you can satisfy yourself that there is fecal matter in the intestines, they had better first be evacuated, after which, as I am well convinced, the proper treatment for dysentery is the employment of opium in some form, carried up to a point of comfortable tolerance; and I introduce this case as illustrative of that method of treatment, and of its probable success. In a disease of this form, which involves no danger to life, the treatment is a mere question of relief and shortening the duration of the disease. I believe that by this method of treatment we can accomplish these ends; at the same time we are to bear in mind the fact, which was established in this hospital some years ago, that dysentery is a self limited disease, running its own course, and ending in recovery, with some rare exceptions, its average duration being about eight or ten days; still, I believe that we not only mitigate, lessen the extent of the disease, but shorten its duration, by resorting to the use of opium.

Cirrhotic Liver.

This specimen was taken from the woman who was shown you at a former clinic, and represents the gross appearance of a cirrhotic liver. It is very much contracted, and presents the hob-nailed appearance in a very marked degree. I will only say, regarding the case, that the patient was tapped several times for abdominal fluid distention, which gave marked relief, and probably prolonged life. She gradually failed, however, lost her appetite, and died of exhaustion. When the autopsy was made, the liver weighed thirty ounces, the normal weight of the liver being about four and a half pounds.

The next cases that I shall present to you, gentlemen, are examples of a disease which I leave for my colleague, Dr. Janeway, to lecture upon. But as there is no didactic course at present, I will make some remarks upon these cases. The history of the first patient reads as follows:—

Aphasia.

David —, fifty-five years of age, a laborer, a native of Ireland, admitted on the eighth of this month. He has been for years a hard drinker, frequently going off on a prolonged debauch, and being drunk most of the time for a month or two. About six weeks ago he was suddenly taken with convulsions, grew black in the face, foamed at the mouth, worked the legs and arms, and then lay in an unconscious state for several hours. His condition gradually improved, and after four or five days he went to work again. Two weeks ago he was attacked in a similar manner, and when consciousness returned it was found that he could not speak, and that his right side was paralyzed. Since then he has been lying in a stupid condition, unable to speak, with but slight power of motion, and rejecting all food. That was the history obtained when he entered, on the eighth instant. On his admission no history could be obtained from him. He had aphasia; was stupid; the pupils were normal; there was no paralysis, no cardiac affection; the arteries were atheromatous. The arteries now feel like a tube composed of hard rings. On the 10th he was a little less stupid, and, although articulation is difficult, he can speak a few words. He takes food much better. The urine is albuminous, but no casts have yet been found, of normal specific gravity.

This, then, is a case of aphasia, connected with paralysis of the right side. These attacks of epileptoid convulsions were very probably due to the excessive use of alcohol, although there is ground for strong suspicion that there exists renal disease. I do not think it is possible, from what data we have, to decide whether the coma and convulsions were alcoholic or uræmic; there may have been a mixture of both. He has recovered from the paralysis, so that we may conclude that there was no extravasation of blood;

there was either thrombosis or embolism, not sufficient to produce any persistent obstruction.

Now, in regard to the aphasia, of which I wish to speak in connection with this and another case; the patient is now able to speak, but how much it is difficult to tell, for he was and is stupid, his general mental faculties being oppressed. Before making further remarks I will bring in the next patient.

No previous history was obtained of this patient, but he has a pulmonary affection, and when he entered the hospital, about three months ago, he had complete aphasia, and paralysis of the right side of the face. You notice that to-day there is scarcely any paralysis of the face, and that he can speak, although he uses words with difficulty, and sometimes uses wrong ones. He has, then, paraphasia.

I will present some general remarks in connection with these two cases, but have not time to go fully into the subject of aphasia. We mean by aphasia the loss of speech, in contradistinction to the loss of voice, which is aphonia. As a rule, aphasia occurs in connection with right-sided paralysis or hemiplegia. With few exceptions the paralysis is on the right side. The cerebral lesion, of course, being on the left side. But we sometimes meet with aphasia, as in this case, without any paralysis of the extremities; there is no evidence that this patient had any paralysis of the upper or lower limbs, but, as you see, he has some paralysis of the facial muscles. We may have aphasia, however, without any motor paralysis. We occasionally meet with cases of that kind. Aphasia has given rise to a good deal of observation and discussion within the past few years, and it still opens a field for discussion, and further investigations are very much to be desired. We have come to know that in a large proportion of cases of aphasia a lesion of some kind exists in the left anterior portion of the cerebrum, in the neighborhood of the island of Reil, and more especially in the posterior part of the third frontal convolution. Now, we may assume that this localization is the rule, but with some exceptions. In some exceptional instances the lesion is similarly located on the right side, giving rise to left hemiplegia; and in some instances, as stated, the lesions are found elsewhere, while the situation in which lesions are usually found is free from lesions. There is always some room for doubt in regard to the latter part of the statement, because there may be lesions which may escape attention unless very close examination be made, and perhaps the closest examination may fail to discover a lesion which does exist.

Now, when we come to the symptom, we find that it differs in different cases, and there are different varieties of aphasia, and some writers, especially the author on that subject in Ziemssens' Cyclopedia, go very much into refinements, in some of which I do not see any practical advantage. But some distinctions are obvious and important. There is one variety of aphasia in which the patient has evidently in mind the appropriate words for expressing the idea; that is, there is no lack of the symbols of ideas which language furnishes in the mind of the patient, but the patient cannot give utterance to those words. The words are in the mind, but they cannot be conveyed by speech. And when this kind of aphasia is complete the patient is perfectly mute, and says nothing, and makes no effort to say anything. That is known as ataxic aphasia, but it is not a proper term, for ataxic means a lack of coördinating power in the muscles, but the patient does not move the muscles at all. You cannot compare it with a case of locomotor-ataxia, in which the patient uses the muscles, but does not use them right. As just said, in this so-called ataxic aphasia there is no effort to use the muscles. Exactly what the nature of the difficulty is, it is difficult to say. But we see the character of the difficulty; the patient cannot give utterance to the words which are in his mind, to express his ideas. That the words are in his mind is evidenced by the fact that he can write them. He knows and understands the words, but cannot give utterance to them.

Then, there is another variety of aphasia known as amnesic aphasia, in which the patient cannot communicate the words expressing ideas, either orally or by writing. This implies a greater aphasic effect than the other. There is still another, in which the patient cannot communicate his ideas by signs, and he does not understand words when spoken to him. Here we have a combination of the different varieties. But in this latter case it seems to me clear enough that there is a condition of mental imbecility. A pretty important conclusion, if true: although I would not say that the patient must necessarily be altogether without intelligence, like an idiot. The difficulty involved carries with it a certain grade of insanity, so that the patient is not accountable for acts. But in ataxic aphasia there is every reason to believe that the patient may preserve the intellectual faculties intact, being capable of performing important acts which shall stand in law, such as the making of a sale, transferring property, and so on. That is a question of much interest and importance when made the occasion of very important medico-legal investigation.

Then, there is another form still, in which the patient has not lost the power of endeavoring to express words by speech, but there is not the command of words which the patient wishes to use to express ideas. He uses wrong words, as this second patient does; although he has improved to a certain extent, he uses wrong words, paraphasia, as it is called. Such a patient seems, sometimes, to have clear enough ideas in the mind, but when he attempts to convey them he uses language which conveys to the listener no apprehension of the ideas which he wishes to express. I have been for several days seeing a patient who has this form of aphasia. There was a little paralysis of the right side, perhaps a little now, but it is very slight. That patient, whenever I see him, endeavors with the greatest possible earnestness to try to express something to me, but he uses incoherent words; his speech is a jumble of words, so that one cannot form the least idea, from the words he uses, of the ideas which he wishes to convey, and that fact gives him, as it is apt to do patients who retain their

intellectual faculties more or less complete, an intense feeling of chagrin, so that after talking that way for a while he becomes almost wild with a feeling of irritation. Paraphasia is the proper name for it. In a practical view this is probably a sufficiently comprehensive representation of this symptom.

Now, these forms of aphasia depend upon the different causes which may give rise to paralysis; and aphasia usually, but as I have stated, not invariably, is associated with paralysis. These different conditions are: Extravasation of blood, and the formation of a coagulum within the brain, thrombosis, the obstruction of an artery by the conveyance to it and lodgment in it of a clot from the heart, an embolus. These are the three causes which stand in relation to the aphasia and the paralysis in the great majority of cases; but other lesions of the brain may be the cause, such as a syphilitic growth, and tumors of different kinds, etc.; but I repeat that, in the great majority of cases, when we come to the question of the pathological condition, we have to decide between extravasation of blood, thrombosis and embolism. I would take up some differential points, etc., but we have not time today. (*New York Surg. Reporter*)

Editorial Department.

Periscope.

The Revival of Static Electricity.

There is an evident revival of static electricity among electro-therapeutists; several articles have already appeared in the Reporter on the subject, and we note one in a recent number of the *Revue Mensuelle*. The *Lancet* observes that the principal advantages of this mode of treatment may be rapidly summed up under a few headings. 1. Anæsthesia: The electric bath, methodically applied with a sufficiently powerful machine during a period of twenty to thirty minutes, and repeated about three or four times a week, has a most remarkable influence upon the cure of anæsthesia. It is, of course, in hysteria that the most rapid, and, it might almost be said, miraculous cures have been effected. No wonder, since even the application of a piece of wood, or a layer of collodion, has sufficed in certain cases to give a good result. But loss of sensibility has been repaired in far more unpromising cases, where organic injury to the nervous centres had been distinctly ascertained; and where the normal condition has not been restored in other ways a great improvement has been achieved in this respect. 2. Contracture, whether hysterical or of a less immaterial nature, has also been successfully treated by Franklinism in our own time, as, in days gone by, the Reverend John Wesley, as we have seen, testified to the marvelous results produced by its use. 3. Chorea and nervous trembling have in various cases been radically cured by the same means. 4. Suppressed menstruation has been restored after a few sittings. 5. Hyperæsthesia and neuralgia have in some instances been relieved, in others radically cured. Our forefathers stated that hypochondria was among the diseases which might be checked by Franklinism. We need not, therefore, be surprised to find that neurasthenia, an ailment closely allied to hypochondria, if it is not the same malady under a more recent and dignified name, has often been considerably ameliorated by the electric bath. That reverses will occur in the practice of every one who adopts static electricity as a mode of treatment, is a fact which can easily be foreseen. All that can be claimed from a positive knowledge of authentic cases is that relief will sometimes be obtained where pharmaceutical treatment had failed as completely as galvanism or faradaism in restoring health. The subject is one which deserves the attention of medical men, and which will, undoubtedly, reward the labors of all scientific observers who may choose to investigate it. Possessing, as we do, generators of a power unknown to our predecessors, better acquainted than they possibly could be with the physiological action of the electric fluid under its various forms, and rich in the accumulation of an immense store of clinical knowledge, we can easily avoid the errors formerly committed in theory, and obtain more satisfactory results in practice. At all events one thing is clear. Electricity may be applied to the treatment of disease in all its varied forms, and we should avoid an exclusive and egotistical attachment to any one method recommended by a particular authority.

The Diagnostic Importance of Odors.

In a recent lecture Dr. Julius Althaus, of London, says:—

I must say a few words on the *diagnostic importance* of certain smells in the sick-room, which was formerly much insisted upon; indeed, whole treatises have been written on the recognition of disease by sniffing. Dr. Heim, who was the popular physician of the day at Berlin some fifty years ago, recognized measles, scarlet fever and smallpox by their peculiar smell on first entering a house, and before having seen the patient. Mr. Bernard, of Upton Park, has recently recorded in the *Lancet* two cases of smallpox in which the patients themselves perceived a dreadful smell, apparently just at the moment of being exposed to contagion; and one of them when suffering from the eruption said that his perspiration had the same smell as that which made him sick before. When attending Skoda's clinique in Vienna, twenty-five years ago, I noticed that this celebrated teacher was in the habit of sniffing when approaching the bedside of patients suffering from the last stages of pneumonia, phthisis, typhoid fever, etc., and he would give a bad

prognosis when he perceived what he called the "cadaverous smell." Mr. Crompton, of Birmingham, has noticed a peculiar earthy smell from the body a week or a fortnight before death, which, he says, has never deceived him—an appropriate illustration of the saying, "Earth to earth." Dr. Begbie distinguished typhus and typhoid fevers by the sanguineous (others call it "mousey") smell of the former. Prof. Parkes has noticed a peculiar odor in the skin of cholera patients. A pungent smell in the chamber of a lying in woman shows that lacteal secretion is well established, while an ammoniacal smell has been said to indicate the approach of puerperal fever. Many women emit a peculiar odor while menstruating, which resembles a mixture of blood and chloroform, and this is believed to arise not so much from the discharge as from the more pungent character of the sweat secreted in the axilla. Persons of costive habit have a fecal smell; and this is also often noticed in hypochondriacs and lunatics. In uræmia, whether owing to kidney disease or to severe retention of the urine, a urinous odor is emitted by the body, and the presence of pus in some part of the body has been recognized by a peculiar warm, milky smell of the patient.

Apart from the odor of the sick-room and the body generally, the smell of the sputa, urine, fæces, sweat, ulcers, etc., was carefully noted by the older practitioners, and utilized for prognosis and treatment. Unquestionably there was much that was fanciful in such ideas; but occupied as we are at present with the study of more precise and definite symptoms, we have, perhaps, gone to the other extreme in neglecting such signs altogether. Everybody has his own special odor, and this varies according to the circumstances of life, the food taken, and the state of health in which he happens to be. That it should be altered in disease, and that special diseases should have special odors, is only what one would expect; yet the increase of cleanliness and ventilation has no doubt done away with a large variety of smells which formerly used to assail the nostrils of the physician.

Perchloride of Iron in Epithelioma.

Several cases of uterine epithelioma at the London Cancer Hospital, treated by perchloride of iron, are given in the *British Medical Journal*, May 21. We quote one, with the remarks of the physician, Dr. H. L. Snow:—

Epithelioma of Cervix Uteri.—M. W., a married woman, aged 40, was first seen on July 11th, 1880. She had one child, aged 10. Four months previously severe flooding came on; and a hemorrhagic discharge had, with short intervals, during which it was watery, persisted from that date. For two or three months she had suffered from severe pain down the right hip, and from backache. On July 11th she was very anæmic. The whole of the margin of the os was soft and spongy, and bled profusely when touched. Tissue of this character could be felt for about one third of an inch all around the outside, and as far as the finger could reach within the uterus. Solid perchloride of iron was placed as nearly as possible in contact with the diseased structure, and retained in position by oiled cotton-wool. Hemorrhage ceased, and pain diminished after the first application. The medication was repeated at weekly intervals for five weeks. She continued in fair health after this, suffering occasionally a little pain (relieved by morphia and belladonna at once) until October, when the hemorrhage recurred. It ceased after another application of the perchloride, repeated again a week later. On November 5th she was in every way better. When next seen, in January, 1881, pain had returned, and there was a profuse watery discharge; there was irregular ulceration around the os, but no papillomatous growth, so the perchloride was not again applied. In March, 1881, the patient was gradually growing weaker.

Remarks.—This treatment is adapted only to papillomatous growths, for masses of soft spongy tissue; in the later stages of epithelioma, where ulceration has removed all the papillomatous tissue, it is of little use. The iron salt appears to "tan" the soft vascular fringes; its use is attended by little or no pain, and appears to be free from danger. In the first and third of these cases it was of unquestionable use; in the second case induration had advanced too far to allow much improvement. This treatment is especially adapted to cases in which the uterine cavity is filled by a villous growth, and obviates all danger from the use of tents, as the os is usually sufficiently patulous to allow the pieces of perchloride to be placed in contact with the growth; a pledget of oiled cotton-wool will then keep them in place. Staining of the fingers may be avoided by previously thoroughly oiling them.

Inhalations of Sanguis Bovinus Exsiccatus.

Dr. C. Seiler, of this city, writes to the *Therapeutic Gazette* for May, 1881:—

Some time ago my attention was drawn to sanguis bovinus exsiccatus and I have used it since in several cases of tubercular and syphilitic laryngitis, in which the act of deglutition was extremely painful and almost impossible, in a novel and very satisfactory manner. Instead of giving it by the mouth or rectum I directed my patients to inhale a solution of the blood, to which a little morphia had been added from an atomizer, and found that in this way they obtained a considerable amount of nourishment from the absorption of the solution by the mucous membrane of the air tubes, and probably also of the lungs.

Having heard from Dr. Stewart that on microscopical examination of the dried blood no blood corpuscles had been found, which seemed to me strange, I first examined a watery solution of the preparation under the microscope, but was unable to detect any blood corpuscles. I then dissolved the dried blood in neutral salt solution, when there was no difficulty in observing numerous restored blood corpuscles; fresh serum I found to have the same effect as the salt solution.

It would seem, therefore, that if the desiccated blood were dissolved in normal salt solution, and that if it were absorbed into the system without having first been digested by the gastric juice, we would have a species of transfusion on a small scale. The results obtained from the adminis-

tration of the blood per rectum, as well as in the manner above alluded to, would warrant such an assumption, which for its verification, however, needs careful observation and experimentation.

I communicate these facts, as they may possibly be of value, and would state that should the matter be considered of sufficient interest I would be willing to furnish a detailed report of the microscopical examination, as well as a photomicrograph of the blood corpuscles, so that there can be no doubt as to their presence in this preparation.

A Case of Blue Chromidrosis.

Some curious cases of chromidrosis were recently presented to the Clinical Society of London by Dr. T. C. Fox.

One case occurred in a girl aged eighteen years, a partial deaf mute, but otherwise intelligent and of good physique, who presented herself among Dr. Donkin's out-patients at the Westminster Hospital, for the relief of a conspicuous and symmetrical black pigmentation of the eyelids and considerable portion of the adjoining cheeks, which caused great concern to the girl and her friends. The catamenia appeared first at the age of fifteen, and had never since been regular in time or quantity, and since that age the girl had suffered from general malaise, severe headache, and very marked habitual constipation. She was not a hysterical subject. The pigmentation was first noticed in September, 1880, on the lower lids, whence it gradually spread over the adjoining portions of the cheeks. Through the kindness of Drs. Sturges and Donkin she was placed under observation in the Westminster Hospital on three occasions, and it was found that the pigmentation varied considerably in amount and intensity, though present in some degree almost continuously. It was always less at the catamenial periods, but seemed to bear a direct relation to the very obstinate constipation, and was more intense and extended the longer the interval between the relief of the bowels. It was found, on many occasions, that whenever the latter became regular the pigmentation disappeared. As a proof of its genuine character, Dr. Fox described the precautions taken to watch the case, on one occasion, for thirty-six hours, after the face had been thoroughly cleansed, but the pigmentation steadily returned. The urine was examined on several occasions, for indican, which was found always to increase markedly in amount *pari passu* with the constipation and the exudation of pigment on the face. This fact, and the relation of the exudation to habitual constipation, are new points in connection with the affection. Examination of the pigment showed it to present characters in all respects similar to those hitherto recorded in other cases by Charles Robin and others. The india-ink-looking amorphous granules were found insoluble in almost all reagents, hot or cold, but displayed a deep blue color when moistened with glycerine, and when dissolved in hot sulphuric acid first gave a beautiful purple hue, and finally, a bistre tint. The pigment was evidently indigogenous.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Lewis D. Mason, Surgeon to the Long Island College Hospital, sends us a report of several additional cases of fracture of the nasal bones treated by his new method.

——We have received a reprint from the *Medical Record*, April 30th, 1881, of a paper on "Nasal Stenosis, Its Influence on Olfaction, Audition, Vocalization and Respiration, and its Treatment," which was read before the New York State Medical Society, February 1st, 1881, by J. O. Roe, M.D., of Rochester, N. Y.

——"The Quality of Mental Operations Debased by the Use of Alcohol—Certain Depraved Mental States Analyzed," is the subject of a paper by Dr. T. L. Wright, of Bellefontaine, O., published in the *Alienist and Neurologist* for July, 1881, a reprint of which has been sent us. The paper is valuable in a medico legal point of view.

——In the address of the president, Dr. Louis A. Duhring, delivered at the fourth annual meeting of the American Dermatological Association, held at Newport, R. I., August 31st, 1880, on the "Foundation of American Dermatology," a copy of which we have just received in pamphlet form, a critical review of the progress in this department of medicine during the past decade, is presented. The address is closed with a few appropriate remarks on the late Prof. Hebra, the father of dermatology, and the loss which science has sustained by his death.

BOOK NOTICES.

The Principles of Myodynamics. By J. S. Wight, M.D., Professor of Surgery and Lecturer on Physical Science at the Long Island College Hospital. New York: Bermingham & Co., 1881. Cloth, 12mo, pp. 162. Price $1.50.

The intelligent student will find in this little book a philosophical analysis of this subject, a thorough familiarity with which is indispensable to the rational treatment of fractures, dislocations and deformities, and which will thus prove of inestimable value to the surgeon. After a classification of the various forces produced by muscular contraction, and a brief explanation of the same, each group of muscles and their actions are examined separately, after which a description is given of the myometer, and its use explained. The principles set forth are illustrated by numerous diagrams, and everything is done to render the subject both attractive and interesting.

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TWO NEGLECTED CLASSES.

There are two charities which are particularly needed in the large cities of the United States, as in not one of them, so far as we know, is there proper provision for the cases to which they apply.

The one is Lying-in Hospitals for Unmarried Women; the other is Hospitals or Asylums for Foundlings.

The reason of their scarcity is, apparently, that the prejudice is extant that they aid in the dissemination of vice, or that they facilitate it, by presenting a refuge for its results. Such a doctrine, if logically carried out, would pretty much do away with all hospitals and all charities, for it is far more frequently vice than misfortune which ultimately drives a human being, in our country, to public charity of any kind. At best, it is improvidence, negligence, or idleness, which, according to Solon, are as bad as actual viciousness.

Sexual vice, has, however, for the prudish charity of our land, some specially abhorrent features, which it is the fashion to shun with the utmost pointedness. Many social philosophers have expressed the opinion that, except crimes of violence, there can be no intrinsic criminality in sexual relations, and that their position before the law is purely one of custom and statute. Without entering at all into this question, which would lead us far afield, the fact that an exaggerated sentiment on the subject prevails in this country is sufficiently obvious from the absence of any but the worst provision for these needy classes in our great cities.

This is frightfully obvious in Philadelphia, as respects foundlings. We recently mentioned that they are usually sent to the Almshouse, where they *all die.* The public attention has been called to this fact by the Grand Jury, and the Society for the Protection of Children from Cruelty has announced itself ready to care for a limited number. But the fact that amid all our charitable institutions we have no foundling hospital is a disgrace and a discredit to our civilization and our boasted religion.

We are somewhat better off in reference to the other class mentioned. There is in this city a most worthy and well conducted charity, unfortunately far too small and too much cramped for means to meet all the demands upon it. It is the State Hospital for Women and Infants, the Seventh Annual Report of which now lies before us. We cannot do better than make a long extract from this report, which ably sets forth the aim and sphere of labor of such an institution, and the need of exertions in its aid:—

The necessity for such an asylum in this community is evident when it is considered that less than one-third of the applicants can be received in our institution, and that, notwithstanding the number and variety of hospitals, homes, and asylums offering generous provision to the poor and unfortunate, including all ages, both sexes, without distinction of nationality, creed, or moral character, every other door but that of the Almshouse is closed to her who, unmarried, is about to become a mother. Deliberate, calculating villainy, fraud, outrage, burglary, or even murder with malice aforethought, seems to excite more sympathy, more helpful pity, more efforts for the reclamation of the transgressors, than are shown toward those who, if not the victims of others, are, at the worst, but illustrations of

human infirmity. It is a question worthy of serious consideration, whether this denial of charity is not a sin against humanity as great as that thus denounced is against society.

But it is not alone for their sakes, whose sin even, as well as their wretchedness and helplessness, pleads for them; not alone for the sake of their innocent offspring, who might at least be saved from the life-long disgrace of birth in the poor-house; but for the sake of society itself, that a refuge should be provided. It is a sad commentary on the boasted benevolence and Christianity of the community, that a girl—perhaps a mere child—who has made the one terrible mistake, is thenceforth cut off from help and hope, and finds every door fast shut through which she would return to an honest life. Is it to be wondered at that she grows desperate under a sense of wrong and of subsequent uncharity and injustice, until, losing all faith and all shame, she herds with the vilest and most degraded of her sex, and sinks into depths of depravity known only to those whom society has cast off? Do not society and the church have their share of responsibility for every such life? It is not necessary to acquit the erring ones of guilt, or to make their misdeed a light matter, though but few of them fall from vicious inclination—most of them through their affections; and it is simply inhuman to make their recovery hopeless, to force upon them the conviction that there is no chance for them, that. try as they may, do what they may, there is nothing for them but to go to the grave with their reproach cleaving to them, while the sharers, and probably the authors, of their sin bear no part of the punishment or the shame.

We need, to prevent misapprehension, to constantly repeat that the chosen work of this institution is not to reclaim women far gone in the paths of degradation, but to save frailty from degenerating into depravity. If it is better to prevent an evil than to cure it, the State Hospital commends itself, by this standard, to the confidence and support of humanitarians.

These are stirring words, and they apply to every large city in our land. They should be responded to by those who with ample wealth are looking where they can spend a portion of it with the most benefit to their fellow creatures. We make the appeal for the two classes who are most friendless and helpless, who are most debarred from the sympathy of their kind and least able to protect and help themselves.

There are other nations in which they are better looked after than with us, where helping hands are extended to their aid, and kindly hearts are willing to lift them from their deep misfortune, confident that no sad association, no bitter prejudice, no wrong doing should check the workers of mercy and hinder the love due our neighbor.

SEASHORE HEALTH RESORTS.

All along the North Atlantic shore, from the mouth of the Delaware to Eastport, in Maine, there is almost a continuous row of summer hotels and boarding houses. The migration of the inlanders to the coast is something enormous, and is yearly on the increase. It is said that as many as one hundred and fifty thousand visitors have arrived in Atlantic City, New Jersey, alone, in the course of one year; and this is but one of many popular watering places.

Pleasure and fashion attract most of this multitude, but a goodly share go for their health; and if the time is properly spent, and the laws of hygiene observed, nearly all will gain in vigor and return braced up for work and renewed energy for the daily conflict.

There are a few with whom the air of the sea coast does not seem to agree. Most physicians who have studied the matter incline to the opinion that consumptives had better keep away from the coast. The mixture of land and sea air, says one of these writers, is unfavorable to delicate lungs. The mortality from phthisis, says another, is, as a rule, greater on the sea coast than on the same parallel inland. The air of the open sea is held to be better for such cases than that of the coast. We can ourselves recall several cases of phthisis which grew worse after a brief sojourn by the sea.

We opine, however, that a distinction may here be drawn, and one of importance. The inflammatory and catarrhal forms of phthisis—to make use of a, perhaps, antiquated but yet convenient classification—are probably generally injured by the alternating land and sea breezes, and the moisture of the coasts; but the scrofulous forms are unquestionably benefited. In fact, it has long been known that many forms of strumous disease quite intractable in hospitals recover spontaneously and promptly, when brought to the sea coast.

Establishments for children have long been successfully conducted on the Northern and Western coasts of France; there is a "Children's Hospital" at Atlantic City, which shows admirable results; and quite lately Dr. F. W.

Bencke, Professor of Pathological Anatomy in Marburg, has published an instructive little book on the advantages of the islands of the German Ocean for similar cases. This learned author states that many years' observation convinces him that the most rational treatment of phthisis which rests on a scrofulous basis is a prolonged residence on the coast islands of the German Ocean. As a health resort for this class of cases he places these islands ahead of the famous Alpine Station Davos, or the celebrated villages of the Riviera and Italy. Partly owing to his strong representations, one or more establishments especially intended for scrofulous and phthisical children are to be erected on these islands.

Probably in no deterioration of health are the beneficent effects of the sea coast life more promptly marked than in the mental and nervous exhaustion which follows excessive intellectual effort, mental overwork and strain; that which is consequent on

"The heavy sorrow, the bewildering pain,
That weighs us down who toil and earn our bread."

It is marvelous to note how soon the fagged-out, jaded man of business recuperates in an atmosphere seasoned with ocean's healing odors. For a day or two he is overcome with drowsiness, the long strain relaxes, and the much-needed rest is taken in deep slumbers. Then follow the restoration of energy, the keenness of appetite, the ready digestion, which pave the way for a renewal of the system.

Few indeed will find a fortnight lost who pass it sensibly at the seashore. Its effects will remain with them for months, and perhaps will save them the trial of a long and painful malady.

Notes and Comments.

Therapeutic Notes.

FUMIGATION IN ASTHMA.

℞. Potassii nitratis,
Pulv. anisi, āā ℥ ss
Pulv. stramon. fol., ℥ j. M.

A thimbleful of the powder, placed on a plate, is pinched into a conical shape and lighted at the top. It is then held near the patient, who inhales the fumes. This is a celebrated London "anti asthmatic powder."

CARBOLIC ACID IN PERTUSSIS.

Mr. A. McDonald says, in the Edinburgh *Medical Journal*, that after an extended trial he finds carbolic acid, in doses of one-fourth minim to a child of six months, one-half minim for a year, and one minim for two years and upward, to be the best remedy for whooping cough. The whoop goes; the vomiting ceases; the paroxyms are modified in intensity and frequency. This result he believes to arise from a similar action to that of creasote on the motor fibres of the vagus to the stomach, and from a lowering of the vitality of the specific germ of whooping-cough disease.

PILOCARPIN IN ALOPECIA.

Instances continue to be occasionally reported where the hypodermic injection of pilocarpin has led to a growth of hair on bald heads. In the *Journal de Méd. et Chirurg.*, Dr. André relates a case where in one month "the hair was sprouting freely."

PIAZZA'S FLUID IN NÆVI.

The composition of this caustic fluid is:—

℞. Ferri chloridi, ℥ viss
Sodii chloridi, ℥ iiiss
Aquæ destill., ℥ ij. M.

A single drop of this is injected by M. de Saint Germain into nævi, and repeated at intervals of eight days. Each injection produces a small scar, and the operation is only complete when the whole surface of the nævus has been transformed into a scar.

GONORRHŒAL RHEUMATISM.

A writer in an English contemporary recommends:—

℞. Sodii salicylatis, ℥ iiss
Olei santali, ℥ ss
Tinct. acteæ racem., ℥ iij
Tinct. cardam. comp., ℥ j
Mucilaginis, ad ℥ viij. M.

Sig.—Half an ounce to be taken three times a day.

Interesting Case of Extra-Uterine Pregnancy.

M. Legendre presented, at the Société Anatomique, the autopsy of a patient who had succumbed in the service of M. Siredey. The patient entered the service in March, 1880, suffering from metrorrhagia and painful swelling of the abdomen; the uterus seemed augmented in volume, and the abdomen contained a tumor; the diagnosis was uncertain; the patient remained a month in the service without further augmentation in the abdominal tumor and then left the hospital for a period of two months. She then entered a second time for the same troubles, metrorrhagia and the tumor, which did not ap-

pear to have augmented in volume. The diagnosis interstitial fibroma was made, and the metrorrhagia ceased, ergotine being administered. During the month of August the tumor became much reduced in volume, but the patient was later on attacked with incoercible diarrhœa and vomiting, and succumbed in marasmus, November 11th. At the autopsy, the intestines, particularly the sigmoid flexure of the colon, were found united by adhesions with the intrapelvic organs. In the midst of this mass, and communicating by a small opening with the sigmoid flexure of the colon, a tumor, which at first appeared cystic, was found. By careful dissection it was found that the two fallopian tubes communicated with this cyst. Finally, at the lower part of the cyst the bones of a fœtus of about four months were discovered. There was intense inflammation of the rectum and colon below the point where the cyst communicated with the colon. Nothing had ever been found in the evacuations, even during the period of incoercible diarrhœa, to lead to the supposition that such a cyst was being evacuated into the bowel; the rapid diminution in volume in the tumor during the month of August was thus only accounted for at the autopsy.

Parenchymatous Injections of the Spleen.

The spleen is a very tolerant organ, and in India the ordinary native cure of an "ague cake" is to puncture it with a large stylet.

Dr. Hammond has recorded a case in which the spleen was punctured, partly for diagnostic and partly for therapeutical purposes; after the swelling had diminished in size he twice injected into the substance of the spleen 3.75 grains of extract of ergot. The result was a rapid diminution of the tumor.

J. Jæger reports (*Thèse Inaug., Strasbourg*, 1880) a number of similar cases. In some cases of splenic leukæmia the spleen was simply punctured, in the hope that, if its tissues were sufficiently deeply penetrated with a needle of considerable size, hemorrhagic infarction and subsequent atrophy would follow; the results did not fulfill this expectation, however. In one patient electro-puncture was practiced, without result. In another the injection of sclerotinic acid was followed by death in about six hours; at the autopsy no trace of hemorrhagic infarction could be found, though the organ had been punctured fourteen times, and electro-puncture also had been practiced four times; there was only a reddish zone round one of the puncture marks. The author does not think that death was due to poisoning by sclerotinic acid, of which a decigram was used, but to the rapid absorption by the splenic vessels of the total quantity of liquid injected, the sudden increase of the mass of blood in the spleen aggravating all the symptoms, a shock which a patient weakened by long illness is not able to resist. The conclusion is thus indicated, that splenic enlargement due to leukæmia should not be injected.

The Origin of Milk Sickness.

A scientific contemporary gives an abstract of a paper by Prof. E. T. Cox, on the "Influence of Geology on Local Diseases," showing what has actually been done by rural drainage to eradicate the dreaded malady that used to prevail extensively in Kentucky and Indiana, known as "milk sickness," because, first attacking cattle, it was communicated to human beings through the milk, butter, and beef of the infected animals. At first it was supposed that the cattle had eaten some poisonous plant; but every suspected grass and weed proved harmless on scientific examination. Then it was held that mineral poisons must lurk in the springs and brooks; but hundreds of samples wer analyzed without detecting the presence of the enemy. At last, an investigation of the clay shales, soft rocks formed from ancient mud beds, and which are microscopic in an eminent degree, revealed the secret. These formations abound in every infected locality, and it now seems clear that they exhale some sort of miasma, when saturated with water, that originated or aggravated the disease, just as other kinds of malaria bring on chills and fever. Proceeding on this discovery, thorough drainage of the wet lands adjacent to the shale beds dried them sufficiently to terminate the conditions favorable to the spread of milk sickness, and the disease disappeared.

Incubation in Disease.

In communicable diseases it is of great importance to ascertain the periods of incubation they present. This was discussed by Dr. Benj. W. Richardson, of London, in a recent address to the Sanitary Institute. He stated that there are twenty-six well known diseases of this kind, and they each have their special periods of incubation, which, though open to exceptions, are fairly regular. The period of incubation was that period which intervened between the introduction of the poison that caused the disease and the first manifestation of its effects. Diseases might be

grouped, according to their stages of incubation, into five classes—shortest, short, medium, long, longest. The shortest period was one to four days. Under this head came plague, cholera, etc. The second period was from two to six days, and under this head came scarlet fever, diphtheria, croup, erysipelas, whooping-cough, influenza, glanders, and pyæmia. The medium period was from four to eight days, and in it are included cow-pox and relapsing fever. The long period was ten to fifteen days, and included in it measles, mumps, typhus, and typhoid. The longest period, forty days, included syphilis, and might include hydrophobia. Dr. Richardson concluded his address by showing the important practical sanitary lessons that are connected with a correct knowledge of these periods of incubation.

The Transplantation of Bone.

At a late meeting of the Royal Society of Great Britain, Dr. MacEwen presented a paper on a case in which he had successfully transplanted bone. The patient was a child four years of age, who had lost two thirds of the shaft of the humerus by necrosis fifteen months previously, and in whom no osseous repair had occurred. The limb was, of course, useless. Dr. MacEwen proceeded first to make a groove in the soft tissues in the position of the bone, relying for this on his anatomical knowledge, and then placed in this groove small fragments of wedges of bone removed from other patients for curved tibiæ. The result has been that a good new bone has been formed, the new portion has united firmly to the upper epiphysis and lower part of the original shaft, and the bone is only half an inch shorter than its fellow. Proper care was taken throughout to have the parts perfectly aseptic. Great interest attaches to this case, which is the first of the kind recorded.

The Use of Respirators.

In this country respirators are much less used than in Great Britain. Whether they are of much account is discussed by Dr. Thomas Hayden, in the Dublin *Medical Journal*. He is inclined to attach little value to those which cover the mouth—oral respirators. He thinks their main, if not only value, is as dust filters, and advises that they should be constructed of the finest wire-gauze, incapable of rusting, and without padding of any kind; they should be frequently cleansed by washing, or by soaking in water over-night, and accurately fitted to the nostrils exclusively. The wearers should be strictly enjoined to breathe through the nose only.

Curability of Phthisis.

Such is the cheerful title of a work just issued by the eminent Prof. Jaccoud, of Paris (*Curabilité et traitement de la Phthisis pulmonaire*). He tells us that phthisis carries off 17.72 per cent. of all who die in Paris; that in that city, in the year 1878, not less than 8479 individuals fell victims to that terrible disease alone, which was at the rate of one hundred and sixty-one per week! If any epidemic had slaughtered that many, how loud the cry would have been! But as it was not a whit more fatal in 1878 than in any other year, nor in Paris than in London or Philadelphia, it excites no comment or alarm. Thus does custom make us all callous.

Dr. Jaccoud describes the varieties of phthisis, tracing them nearly all to defective nutrition.

When it comes to treatment he is full of details, passing in review all the usual remedies, and examining their indications and contra-indications.

On the question of climatic treatment he is especially rich, having himself visited and personally studied every health station of any importance in Europe.

The consoling reflection is left by his book, that consumption is a disease which is curable, and that taken in time, in a patient who has the will and the means to follow out the directions of his physician, the latter is generally master of the situation.

The Medicinal Value of Mistletoe.

The authors of the *National Dispensatory* dismissed the mistletoe as an obsolete remedial agent, of uncertain action and doubtful virtues. Dr. R. Lee Payne, Jr., has submitted it to a searching physiological and clinical investigation, and has reached a very different conclusion (*North Carolina Medical Journal*, May, 1881). His observations lead him to maintain that in those cases of post-partum hemorrhage in which the loss of blood has been extreme and the nervous shock so severe that we dare not give ergot lest paralysis of the heart result, mistletoe, from its stimulant action on the heart, may be given with greater safety and with even more confidence as to relief of the flooding, than ergot. Again, in retained placenta of abortion, at once so annoying to the physician and dangerous to the patient, mistletoe will be found a most efficient remedy. Further, from its stimulation of the

vaso-motor nerves and consequent contraction of the arterioles, it will do good service in cases of menorrhagia, metrorrhagia and hæmoptysis. Its action on the heart indicates its usefulness in all diseases of this organ characterized by weak action and low arterial tension. And finally, diseases of the brain and spinal cord, especially those in which congestion is marked, we may expect to be benefited from its exhibition. Dr. Payne's carefully prepared article certainly merits the attention of readers.

Special Reports.

NO. XII.—ANTISEPTICS.

(*Concluded from page* 23.)

Turning now to special antiseptics, we naturally name first

Carbolic Acid.

It may be well to give its solubility, from a recent writer.

Acid Carbolic, soluble in	1 in 20,	cold water.
	5 in 1,	alcohol.
	3 in 1,	chloroform.
	4 in 1,	ether.
	1 in 1,	glycerin.

An *antiseptic powder with carbolic acid* is prepared by P. Bruno, by melting together rosin, ℥ ij with stearin, ℥ ss, and adding to the cooling but still liquid mixture carbolic acid, ℥ vj, which is to be carefully triturated with lbiss of precipitated calcium carbonate, until a uniform powder is obtained.

Carbolic Acid in Facial Erysipelas.

Dr. Rothe observes (*Betz. Memorabilien*, 1880, No. 9) that however efficacious the subcutaneous injection of carbolic acid proves in arresting the course of erysipelas, it is not suitable when the face is the part attacked, for not only does it give rise to considerable pain, but induces a swollen and painful condition of the periphery. For some years past he has been in the habit of using the following application:—

℞.	Acid carbolic,		
	Sp. vini,	āā	one part
	Ol. terebinth,		two parts
	Tinct. iodine,		one part
	Glycerine,		five parts,

penciling the inflamed skin and its vicinity with it every two hours. No pain or sense of burning is produced, and the skin is usually next day pale and wrinkled. The further progress of the disease is more effectually arrested than by any other remedy, any new patches being rapidly effaced, so that in three or four days the facial erysipelas is usually at an end. The penciled places should be covered by a very thin layer of wadding. When febrile action is present the ordinary internal measures must also be resorted to.

Phenol.

This purified form of carbolic acid is generally to be preferred. At a meeting of the St. Louis Medical Society, reported in the St. Louis *Med. and Surg. Journal*, Nov. 1880, Dr. Carson presented a specimen of pure *phenol*, which he said they had adopted altogether in cases of antiseptic surgery, at least where Lister's method is practiced. It is recommended by Lister himself. It is less irritating, and on account of the odor, not so disagreeable as our ordinary carbolic acid. It causes a little tingling of the ends of the fingers after they have been in the solution for some time, though not nearly so decidedly marked as ordinary carbolic acid. It is expensive, costing four dollars per pound, and it requires considerable time, four or five months, to procure it from the manufacturers.

The Chlorophenols.

These are said to promise admirably. Their history is as follows:—

M. Dianin, as reported at the annual meeting of the Russian naturalists, held at St. Petersburg, January, 1880, found that on mixing solutions of phenol and "chloride of lime" a reaction at once set in, and the chief product was *trichlorphenol*. This compound was also found to arrest fermentation in a much greater degree than phenol itself, and the mixture above mentioned was therefore recommended by him as much better suited for application to sloughing wounds than phenol itself.

The matter has since been more thoroughly studied by C. O. Cech. In the *Journal für practische Chemie* (October 18th, 1880), he points out the advantage of using chlorophenol instead of phenol in dressing wounds in a state of suppuration. It has been constantly noticed that wounds treated with carbolic acid alone do not heal so quickly as when a mixture of carbolic acid and chloride of lime is employed, and M. P. Diamin found that when carbolic acid and chloride of lime were brought together a chemical change takes place, mono-, di-, and trichlorophenol being formed, and that from the resulting lime and chlorophenol mixture the chlorophenols can be separated out by adding some strong acid, and by distilling with water. The author does not consider this method practically available. The best and cheapest way of getting a mixture of chlorophenols suitable for dressing wounds he found to consist in decomposing carbolic acid with chlorine gas, a somewhat expensive method, but

at present the best known. The price of such a chlorophenol is at present $1.25 per lb. The chlorophenol mixture contains all three chlorophenols, but consists essentially of trichlorophenol, which latter is the chief disinfecting agent. The chlorophenol mixture is a blood-red crystalline mass of a peculiar penetrating odor and bitter taste. It is easily soluble in alcohol and ether, and is, in its topical effects, far less cauterizing than carbolic acid. By repeatedly pressing the red crystalline magma between blotting-paper, and crystallizing from ether, dazzling white prismatic needles are obtained, which, upon adding water to their alcoholic solution, precipitate in flocks. This precipitate is dissolved in alcohol, and the bandages impregnated with the solution. The author thinks that trichlorophenol will ultimately supersede carbolic acid in dressing wounds, and as an antiseptic agent.

Salicylic Acid.

This antiseptic cannot be said to have gained very much in favor. Its use as an anti-ferment is believed to be injurious. At least, quite recently, the French Minister of Commerce has issued a circular to the prefects instructing them to forbid the sale of any article of food, solid or liquid, containing salicylic acid, or any compound of it. The attention of the sanitary authorities has been called to the danger to public health by the use made of this substance for the preservation of food, and M. Tirard, has had a thorough analysis of its properties made by the Consultative Committee of Hygiene. The result of the committee's examination is, that the acid is injurious to health, not only on account of its direct effects on the system, but also indirectly by permitting the fraudulent introduction into food of other "deleterious, or at least unwholesome substances."

Salicylated Starch,

Recommended by Dr. Kersch, in eczema, is prepared by adding pure starch in small portions to a rather larger quantity of a two or three per cent. solution of salicylic acid in alcohol, agitating well after each addition. The excess of liquid is decanted, the starchy mass enclosed in muslin, well pressed, rubbed into powder and dried at about 80° C. A similar intimate mixture of salicylic acid with starch cannot be prepared by even long-continued trituration of the two substances.

Salicylol.

This is salicylic anhydride, and has been extolled in a late pamphlet by M. Pierre Apèry. When salicylic acid first came into notice, in 1875, the author was led, by its relation to salicylol, to investigate the antiseptic properties of the latter substance. These were found to be surprisingly great. One striking experiment may be quoted. The dead body of a snake, already well advanced in putrefaction, was plunged into a solution of salicylic acid. The putrefaction continued, but was arrested almost instantly on the addition of a few drops of salicylol. The great cost of the substance has prevented experiments on a large scale, but it is hoped that some means of producing it cheaply may be devised.

Menthol.

This crystalline solid, derived from oil of peppermint, was brought forward last year, in Edinburgh, as an antiseptic and anti-neuralgic. At present it is too costly for use for the former purpose.

Eugenol.

The antiseptic properties of oil of cloves and oil of peppermint have long been known, since they have often been employed to prevent starch, etc., from becoming mouldy. They have also been employed as remedies for toothache. Eugenol, which is extracted from these oils, and which is also known as eugenic or caryophyllic acid, is found to have similar powerful antiseptic properties. It has a formula, $C_{10}H_{12}O_2$.

Thymol.

Thymol-vaseline ointment is made by dissolving twenty grains of thymol in one ounce of vaseline. It is useful in eczema and as a parasiticide. It is said that thymol has the property of immediately removing the smell of tobacco.—(*Phil. Med. Times*, October 23.)

Alumina Salts.

A solution of acetate of alumina has been highly recommended in Germany, both as an active disinfectant and a cheap one. What is called *chloralum* appears to be simply a solution of chloride of aluminum, and has the specific gravity of 1.244. (For analyses see *Amer. Jour. Phar.*, 1872, p. 268 and 397.) An imitation of it can be made by mixing alumina with about twice its bulk of water, and dissolving this base in strong muriatic acid, by the aid of heat, in a capsule, and continuing the evaporation until any excess of uncombined hydrochloric acid is driven off; when cool, dilute the solution with sufficient water to reduce the specific gravity to 1.244 at 60° F. Should any deposit occur before adding the water the solution should be first filtered through cotton.

Eucalyptol.

The experiment of Schultz in 1879 (*Centralblatt für Chirurgie*, No. 4) apparently demon-

strated that oil of eucalyptus is preferable, in the Listerian maneuvres, to carbolic acid. The latter prevents the development of bacteria in a solution of 1:200, while the oil in a solution of 1:666, in this respect being more than three times as strong as the former. Moreover, it smells pleasant, is readily dissolved in alcohol, other oils and paraffin, and is so harmless withal that more than a drachm of it (5 grams) was taken internally without any unpleasant effect.

Terebene.

At one of the recent meetings of the Cambridge, England, Medical Society, Mr. Stear advocated the use of a mixture of terebene and olive oil, in preference to carbolized oil, as an application to wounds, and more especially in cases of cancer and other foul smelling sores. It was hardly inferior to carbolic acid as a disinfectant and deodorizer, and it had the advantage of being non poisonous, of possessing an ozonizing property, and of being pleasant to the smell.

Alcohol.

The value of alcohol as an antiseptic dressing is apt to be overlooked. Dr. J. L. Suesserott calls attention to it in the *Med. Times*, Dec. 4th. He says:—

A decade of years, through which I have used the article in question very many times, has not in the least abated my admiration for and confidence in it. Within this month I treated a pulpified wound on the top of the head of a man of over forty years of age, which at first presented the most unfavorable appearance, as it had been inflicted by a blow with an axe-handle in the hands of a strong young man, with no other dressing than whisky, and as a result had the parts to heal without any suppuration, sloughing, or the least tendency to erysipelas. The injury was inflicted on election day, November 2d, and its severity upon the nervous centres was so great, that, notwithstanding the entire repair of the scalp, at this writing, November 25th, the entire right side of the patient is very much benumbed, and untoward brain troubles may yet be encountered.

Nitrite of Amyl.

In the *Lyon Médical* it is stated that Dr. Weiser has discovered that nitrite of amyl exerts a remarkable disinfecting influence upon the urine; and he has employed it in the treatment of vesical catarrh. Three drops of nitrite of amyl in thirty c.c. of lukewarm water were injected into the bladder twice a day. For the disinfection and preservation of urine, nitrite of amyl is preferable to the use of carbolic acid, as the albumen tests are not thereby interfered with.

Resorcin.

This appears to be a quite important addition to antiseptic substances. An excellent history and description of it, by Mr. Fred. B. Power, may be found in the *American Journal of Pharmacy* for May. Resorcin is a diatomic phenol, extracted from certain plants, as assafœtida, and produced synthetically by the action of potash on chlorophenyl sulphuric acid. It is a colorless, crystalline substance, of a sweetish and harsh taste, soluble in something more than its own weight of water, also soluble in ether and alcohol. It was first obtained, in 1864, by fusing galbanum resin with potash, the result being about six per cent. It has since been made from other resins and in other ways. A pamphlet on it has been written by Dr. J. Andeer, of Wurzburg. He found that a one per cent. solution prevented the decomposition of urine for months, and also destroyed the organic causes of putrefaction; it preserved pancreas and blood perfectly, retaining even their natural odors. Wounds treated by it healed by first intention, and those poisoned by septic material yielded to it as completely as to carbolic acid. Applied dry to the skin it is not absorbed, and is not irritating; hypodermically a two per cent. solution may produce painful cramps and twitchings, but never abscess. On the moist lips it will raise a white blister. Used with the atomizer it is entirely unirritating to either eyes or lungs, and nearly free from odor. Applied to granulations the crystals are a painless and mild caustic.

M. Dujardin Beaumetz has made use of resorcin for external application in the treatment of the worst kind of wounds, as syphilitic ulcerations and vaginitis, and the results which he has obtained have been most satisfactory. He has been less satisfied with the action of resorcin in gastric catarrh. He has, however, utilized this substance as an internal application, in two-gram doses daily, though without any decided result.

For exhibition in the fluid form the best vehicles are alcohol, glycerin and syrup of orange, but it is preferably administered in powder inclosed in wafers or gelatin capsules, whereby its peculiar taste is completely masked.

It is stated that the following formula can be recommended:—

℞. Resorcini puri, gr. viij
Aquæ destillat., ℥ iij
Syrupi aurantii, ℥ j. M.

Sig.—A tablespoonful every two hours.

For an emulsion:—

℞. Resorcini puri, gr. viij
Amygdalæ dulcis, ℥ v
Syrupi aurantii, ℥ j. M.
Ft. emulsio.

Sig.—A teaspoonful every two hours.

The spray should be made thus:—

℞. Resorcini puri, grs. xviij
Aquæ destillat., ℥ viij. M.

Prof. SADTLER, before a late meeting of the Philadelphia Pharmaceutical Society, called attention to the fact that at a previous pharmaceutical meeting (see *Amer. Jour. Pharm.*, 1879, p. 276) he had explained the formulas of resorcin, resorcin phthalein (fluorescein), phenol-phthalein, of tetrabromfluorescein (eosin) and of uranin; also that the antiseptic characters of resorcin alluded to by Dr. Power might have its explanation in the character of it as a diatomic phenol; that, taking the monatomic phenols, carbolic acid, cresol, thymol and carvacrol, the derived phenols contained in creasote, the diatomic phenol resorcin, the triatomic phenol pyrogallol, or pyrogallic acid, and the half phenol salicylic acid, we had a series of bodies all possessing the antiseptic properties in a more or less marked degree. Three of these were thoroughly recognized in this connection, viz., carbolic acid, salicylic acid, and thymol, and it seemed probable that all would prove efficient.

In WURTZ's *Dictionaire de Chimié*, Tome II, the bibliography of resorcin is quoted very fully, and a writer in the *Chemist and Druggist*, thinks that ANDEER derived much of his knowledge from that source.

Picric Acid.

Prof. CHÉRON has pointed out that picric acid is a very powerful antiseptic. It has been employed at Saint Lazare, for the disinfection of latrines, and it was found that the fecal odor was readily removed by it. It also prevents the putrefaction of urine, and is said to be a useful application to wounds. The potash salt has been given as a febrifuge, with good effect, by BRACONNOT. Dr. WAINWRIGHT, of New Jersey, has treated malarial fevers with success by picrate of ammonium. He has given it as a pill in doses of a grain, or a grain and a half, increasing it to two grains.

CORRESPONDENCE.

The Sanitary Condition of Our Seashore Health Resorts.

ED. MED. AND SURG. REPORTER:—

Considering the enormous increase of travel in summer, to all the popular seaside resorts, thoughtful physicians are becoming solicitous as to their drainage system, and other sanitary arrangements. I cannot speak from personal knowledge of other places, except as an occasional visitor, but with regard to Atlantic City, I am in a position to state, for the information of the profession, exactly what has been done, and is now being done, toward preserving the air uncontaminated.

It is in the highest degree important that persons who leave the city for the good of their health should go where they may be exposed to healthful influences, and none other. Physicians, therefore, ought to inquire most carefully into the condition and sanitary systems of the various resorts in the country, or at the shore, to which their patients are sent for the summer months. Delicate invalids may escape from the foul-smelling and insidiously destructive sewer gas of the large cities, only to be stricken down by the malarial poison which lurks in the shady bowers of many an alluring country place, or lies in ambush along the banks of those placid rivers which are so attractive to many health and pleasure seekers.

The sandy beaches on the New Jersey coast are generally free from malaria, except at points where fresh water streams empty into the ocean. Professor Alfred L. Loomis, of New York, in a recent lecture, discussed the subject of malaria, with his accustomed ability. He said: "Salt water marshes are, as a rule, especially free from malaria, but mix salt and fresh water, as on some of the New Jersey marshes, and you have the conditions for generating the poison. Marshes that rest on a substratum of sand are not so malarial as those that rest on limestone, clay, or mud."

Atlantic City, which, by reason of its rapid growth and prominence among health resorts, is now attracting to an unusual degree the critical attention of sanitarians, is fortunate in being surrounded by a plenitude of unmixed salt water, and in being founded upon the driest of sand. So far, therefore, as concerns malaria, that subtle, intangible poison, which defies alike the microscope and the reagents of the chemist, but produces in some unknown way the periodical fevers, Atlantic city seems to be highly favored. Intermittent and remittent are strangers to the regular residents, and it is the constant experience of malarial patients coming here that they obtain rapid relief with far less medication than at home, often, especially in the case of children, with no medication at all.

But the towns built upon the flat beaches of the sea coast, however exempt naturally from marsh miasm or malarial poison, have to overcome certain difficulties in solving the problem how safely to remove their garbage, kitchen slops, and night soil. Some of the largest of these towns have streams of water running through them, into which they empty their sewage. This is manifestly objectionable; such streams thus becoming open sewers, and most offensive and dangerous to health in the hot season, even if they did not deposit their foul burdens into the sea in the vicinity of the bathing grounds.

Atlantic City early hit upon the right system for such places—that of carting entirely away from the town all refuse matters—but until the present year, has never carried this system out with sufficient thoroughness or with suitable precautions. Now, for the first time, we have a thoroughly organized, energetic and determined Board of Health, with the ability to understand

what is needed, with ample powers to enforce compliance with its regulations, and with courage to prosecute its labors, notwithstanding occasional opposition. The president of this Board, and real originator of the plans it is carrying into effect, is Dr. F. B. Lippincott, an able and clear headed physician, formerly practicing at Burlington, and now proprietor of a hotel here.

Among the important improvements lately effected may be mentioned the following: There has been a general filling up of lots which were below the city grade. A most stringent contract has been made for the removal of garbage, at least once a day, in sealed or closely-covered wagons, from every hotel and dwelling house in town, and its transportation by rail back into the country, where it is used for fertilizing purposes. All privy wells are required to be cleaned at stated intervals, and the contents removed in odorless excavators, and these latter appliances are already here in use. A health inspector has been appointed, whose duty it is, under the supervision of the Board, to watch closely that the contractors do their work properly, and keep their wagons and other apparatus free from offensive smells. He is also required to keep a sharp lookout for nuisances, and to assist the Board in inspecting any premises that may be complained of as in an unhygienic condition. Whenever two citizens make such a complaint the Board is required to take cognizance of it, and this is now promptly done. Heavy fines have been imposed, in several instances lately, for deviations from the stringent regulations of the Board—in fact, for doing what was considered quite permissible only two years ago.

A few words may be said as to the drainage of Atlantic City. There are now eight sewers, which run from the ocean side of Pacific avenue across the town and empty into a canal or ditch out on the meadows, which in turn empties into Absecon Inlet. This would be objectionable if the attempt were made to carry off by these sewers any animal refuse, or other offensive matters, such as that from water closets, or even kitchen-slops. Though they have a fall of from three to six inches in every one hundred feet, it would be impossible for them to remove such substances with sufficient rapidity and thoroughness; and even if they could, to pour such a quantity of offal into the ocean at our very doors would be most undesirable. Therefore, the sewers are used only to drain away the ordinary surface water, the refuse matters being removed as above described.

The system in use here, as now carried out, is believed to be the best attainable on the flat seaside beaches. If any sanitarian can suggest a better, the health authorities of Atlantic city would be pleased to hear from him.

There are many new towns springing up along the New Jersey coast, some of which are projecting elaborate plans of sewerage, while others are doing nothing, simply leaving all their animal refuse to decay on the premises and pollute the air. However, the strong sea-breezes which constantly fan all these beaches are laden with the powerfully antiseptic compounds of iodine and chlorine, so that hygienic laws may often be violated with impunity.

Another important consideration at these seaside resorts is the drinking water. At many places the surface water obtained by digging a few feet in the sand is habitually used for drinking and culinary purposes. This is decidedly unsafe. Intestinal fluxes, and even typhoid fever, may be produced in susceptible persons by using such water. The hotels, boarding houses and cottages in Atlantic city are supplied with cemented cisterns or wooden tanks for collecting rain water, and either the latter or melted ice is always obtainable; except at a few second-rate boarding houses, no other water is ever offered to guests. It is well enough that patients going to the shore should be cautioned as to this point.

There are other matters, especially those relating to personal hygiene, which need to be strongly enforced upon patients visiting the seashore; but this paper is already sufficiently extended.

BOARDMAN REED, M D.

Atlantic City.

Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

The following case has some interest:—

October 5, 1863, I was called to attend Mrs. H., in labor. Patient, a healthy multipara, was in great mental distress. On inquiry I found the cause to be the fixed belief that her child would be deformed. She stated that, soon after conception, a young calf got its back hurt, and that she had doctored it for several weeks, since which scarcely a night had passed in which she had not, in her dreams, seen the wound in the calf's back. It was a shoulder presentation, and labor was terminated by podalic version. Sex, male, and perfectly formed; except a spina bifida, implicating the upper half of the sacral, and lower half of the lumbar regions. It died in convulsions the third day. Both parents and two or three older children of the family concurred in stating that the spina bifida was an exact counterpart of the wound she had so faithfully tried to cure the preceding spring.

San Diego, Cal. F. R. MILLARD, M.D.

NEWS AND MISCELLANY.

The New York Medical Mission.

The New York "Medical Mission" was formally opened last week, at No. 5 East Broadway, Dr. Agnew presiding, and Rev. Dr. Taylor delivering the inaugural address. The object of the mission, as stated in a published circular, is "to reach that numerous class of poor persons, always to be found in a large city, who are generally inaccessible to the Gospel, by giving them gratuitous medical relief, and at the same time preaching the Gospel to them, thus linking together in the missionary physician, efforts to heal the body and to save the soul." The first medical mission in the United States was established in Philadelphia, two years ago, and the second at Chicago, about a year since, in charge of Mr. D. L. Moody. Among the board of managers of the New York institution are Mr. Cornelius Vanderbilt, Mr. Benj. C. Wetmore, and Robert Hoe, Jr.

The Adirondacks for Consumptives.

A writer in one of the daily papers warns against the overcrowding of phthisical patients in this resort. He writes:—

A mournful illustration of the cruel wrong which is done by spreading broadcast the delusion that persons in the last stages of consumption can be cured by a change of climate, is furnished by this year's experiences in the Adirondacks. The number of victims this season to an exaggerated belief in the curative properties of the Adirondack region has been unprecedented. Sixteen persons, during the present month, have died in the woods, or en route, and their bodies have been carried back through Plattsburg. All these died in want of the comforts and consolations which have surrounded them at home, and in many instances, no doubt, death was hastened by fatigue, deprivation and home sickness. And still the mournful procession to the woods goes on, and still people are found, well meaning or otherwise, who are willing to take the responsibility of stimulating a false hope.

Value of Swimming.

Some years ago a venerable member of the profession, now departed this life, wrote an able advocacy of swimming as a form of exercise, and published it in the REPORTER. We note that Mr. H. J. Barron, Secretary of the Swimming Association of Great Britain, writes to the London *Times* to urge the necessity of children being taught to swim "a good, straightforward breast stroke." In case a person falls into a heavy sea, a side-stroke should be adopted, presenting the back of the head to the dash of the waves. If, he says, a child is taught merely to "tread water," no doubt, after a few lessons he will support himself; but he will not be likely ever afterward to learn to swim with a good stroke. But if a child is taught the breast-stroke properly he will learn to support himself in fewer lessons, probably, and as he gains strength and confidence in succeeding years will practice and become efficient in a great variety of strokes.

U. S. Marine Hospital Service.

A circular containing the new arrangements for the care of seamen has just been issued by Supervising Surgeon-General Hamilton, of the U. S. Marine Hospital Service. It gives in detail the persons authorized to treat seamen on behalf of the government, the manner of treatment, the expense thereof, etc., etc. The following quotation covers the service at Philadelphia:—

"The medical attendance to be furnished by a medical officer of the Marine Hospital Service; the Jefferson Medical College Hospital to furnish board, nursing and medicine, at ninety cents per day, and to provide for the burial of deceased patients at $10 each. Transportation from the Marine Hospital Office to the hospital to be furnished by the hospital authorities, when required."

QUERIES AND REPLIES.

Contagiousness of Gleet.

MR. EDITOR.—Please inform me, through the column of "Queries and Replies," whether, in your opinion, in a case of gleet of sixteen years' standing, the discharge is still inoculable, and a positive bar to marriage. By so doing you will greatly oblige,

Yours, respectfully,

T. R., M.D.

Ans.—We should not think the discharge contagious; but leading authorities are at variance on this question.

Purgation in Abortion.

MR. EDITOR.—What about the propriety of giving drastic purgatives in threatened abortion, consisting of calomel, leptandrin and podophyllin? Is it proper to give purgatives the next day, consisting of the same ingredients? Further, what about giving emetic doses of ipecacuanha when a patient has stomatitis, enteritis, colitis, peritonitis or pelvic cellulitis?

A YOUNG M.D.

Ans.—The rule is, when the abortion has progressed so far that, in the opinion of the physician, it cannot be checked, then it should be hastened; when it can be checked, of course, drastics are out of place. The last query is too vague.

MR. EDITOR.—Will you please inform us, through your "Queries and Replies," where we can obtain the "printed gummed address" of all the physicians and clergymen in the United States, or any one State we might select. T. and B.

Ans.—Write to the Business Address Co., New York city.

MARRIAGES.

BRADFIELD—ELLWANGER.—In this city, on Thursday morning, June 16th, at the parsonage of the Arch Street M. E. Church, Seventeenth and Arch streets, by the Rev. O. H. Tiffany, D.D., Dr. G. Milton Bradfield and Louisa S. Ellwanger.

CRANE—ECKARD.—June 3d, 1881, at Abington, Montgomery county, Pa., by Rev. J. R. Eckard, Charles L. Crane, M.D., of Sumter county, S. C., and Anna Maria, daughter of the officiating clergyman.

HANNA—SLAYMAKER.—At Lancaster, Pa., May 26th, 1881, by the Rev. James Y. Mitchell, D.D., Albert A. Hanna, M.D., of Maryland, and Mary E., daughter of the late Amos H. Slaymaker.

KITCHEN—CONSTANT.—On June 1st, at the residence of the bride's parents, by the Rev R. S. MacArthur, Dr. J. M. W. Kitchen and Minnie E. Constant.

NICOLL—DELANY.—June 15th, 1881, at the residence of the bride's parents, by the Rev. Dr. M. W. Hamma, assisted by the Rev. Thos. A. Gill, United States Navy, Dr. S. B. Nicoll, of Shelter Island, and Mrs. Maggie A. Delany, of Brooklyn, N. Y.

PALMER—BANTA.—On Wednesday, June 15th, at the residence of the bride's parents, by the Rev. John A. Westervelt, Dr. Delos Palmer and Jennie, only daughter of Albert S. Banta, Esq.

SHIMWELL—BOWKER.—In this city, on the 14th ult., by the Rev. George F. Wiswell, D.D., at the residence of the bride's parents, Benjamin T. Shimwell, M.D., and Emily Bishop, daughter of Frederick Bowker, Esq.

WHITMARSH—GERST.—In Brooklyn, N. Y., June 16th, by the Rev. A. S. Graves, Henry A. Whitmarsh, M.D., of Providence, R. I., and Miss Martha M. Gerst, of Brooklyn.

WILHELM—FLORER.—At the residence of N. M. Florer, Esq., near Milford, Ohio, by the Rev. T. J. Melish, Dr. James Wilhelm and Miss Mary Florer.

THE

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Original Department.

Lecture.

SENSIBILITY—NEUROSES OF THE PHARYNX AND LARYNX.

BY PROF. A. JURASZ,
Of Heidelberg.

Translated for the Medical and Surgical Reporter.

Gentlemen.—The patient whom I now introduce to you has been sent to me for the purpose of being subjected to a closer examination. He is a laborer, aged 35 years, very well nourished and strongly built, and says that he has never been seriously ill.

Two days ago, while drinking with a companion, he quarreled with the latter, and at the moment when he had the glass at his lips, received a severe blow from him, so that the glass was broken into small fragments. Now he maintains that he swallowed a piece of the glass, and complains of a continuous pain in his throat, especially when he attempts to swallow.

Upon closer questioning we learn that the pain is referred to the pharynx near the larynx, and that it was more severe yesterday than it is to-day.

Professor Braun examined the patient yesterday, but neither by palpation nor inspection was he able to discover any foreign body, and he is before us now for the purpose of submitting to an examination with the laryngoscope, so that we may discover, if possible, the cause of his suffering.

Upon examination we find the mucous membrane of the pharynx of normal color; neither do we find any anomaly when we examine the posterior nares, by means of the rhinoscope. A foreign body, or a lesion produced by one, is nowhere discoverable. The larynx is also perfectly intact, phonation is normally produced, and the voice is clear. When I touch the walls of the pharynx with a laryngeal sound, we find one point which, when touched, gives the patient pain. This point is situated on the posterior wall of the pharynx, about opposite the middle of the upright epiglottis. The mucous membrane in this region is perfectly normal. By moving the sound about over the mucous membrane, we are enabled to say with certainty that neither here nor anywhere else is there imbedded a foreign body. And yet the patient is perfectly sure that there is a piece of glass in his throat. We must, therefore, ask ourselves the question, have we here a case in which a painful sensation is produced without any discoverable cause, or is the patient simulating.

The latter is not very probable, because the patient declares that he has no ill will against his friend, and that he does not intend to take any legal steps against him. We have, therefore, no cause to doubt his veracity.

But, if his assertions are plausible, we must then decide whether he has really swallowed a piece of the broken glass or not, and if the first, whether the fragment is not somewhere imbedded in the tissues, or whether, if already removed, the pain is only owing to the injury.

The first question we have already answered, by our examination, in the negative. Yet I must here state that we must in such cases make a very minute examination of all the parts before we state positively that there is no foreign body present, as such a body may be far removed from the spot where the patient apparently feels it.

This is owing to the poorly developed sense of touch of the mucous membrane of this region.

The second question refers to the possibility that a fragment of glass may have been present for a time, and after having been removed, the pain may be caused by the injury inflicted. But this also, is not the case; neither Prof. Braun nor we have been able to find even the slightest swelling or hyperæmia.

Therefore, we are led to assert that our patient is mistaken when he believes there is a fragment of glass imbedded in his throat, or that there ever has been one there. The pains of which he complains are the expression of a disturbance of the tactile sensation, which we can explain about as follows: At the moment of the accident our patient was very much excited. The possibility of his having swallowed a fragment of glass became, in consequence of the great fear of most people of such an occurrence, to him, a certainty. From this to feeling the body was, owing to his excited condition, only a step, and thus we find him an excellent example of a phantastic paræsthesia of the pharynx, such as is not seldom met with in practice.

The pathogeny of this case is not without interest, as it belongs to a class of cases which are met with often enough in general practice, but which have, until now, seldom been the subject of scientific research. These are the anomalies of sensibility of the pharynx and larynx. They are divisible into two groups: The anomalies of *kind* and *quality* of *perception*, or feeling, and the anomalies of *quantity* or *force* of perception. The first are termed paræsthesias, and by that term we mean those forms of abnormal feeling which are either entirely of spontaneous origin, or are caused by very insignificant local irritations. These perceptions do not correspond with the local changes in any case.

The anomalies of quantity and force of perception, on the contrary, are relative to the latter, and are, if the sensibility is less than normal, called hypæsthesia and anæsthesia, or if it is increased, hyperæsthesia and hyperalgesia.

Neuralgia of these organs is classed with neither of these forms, but is considered as a distinct form. Its chief symptom is the pain, which is paroxysmal and periodical, and there are no local changes discoverable.

Paræsthesia of the pharynx and larynx makes itself manifest by a great variety of sensations; the patients complain of oppression, tickling, burning, dryness or soreness; in other cases they maintain that they feel something creeping about in their throat, or that a foreign body is imbedded therein.

Among the affections which are accompanied with a special predisposition to paræsthesia of the throat, we must give hysteria the most prominent place. The so called globus hystericus is described as a ball which ascends from the stomach and is impacted either in the pharnyx or larynx, and which often gives rise to the most intense dyspnœa. Other sensations, such as expiring cold air, straw, etc., in the throat, have been described.

Scarcely less seldom do we find paræsthesia of the throat connected with hypochondriasis. These patients imagine themselves suffering with laryngeal phthisis, and complain of pain, burning and soreness of the throat, of which they are not relieved until they notice some other trouble, which still more endangers their lives.

Popular treatises on diseases of these organs can often be proven as a cause for such troubles. All these abnormal sensations can subside in a short time, or they can continue for a long period. The latter is especially the case with speakers and singers.

Another affection which can be accompanied with paræsthesia of these organs is anæmia, and it also very often accompanies chronic inflammatory diseases of the lungs.

Curious and interesting are those paræsthesias of the throat which we meet with in perfectly healthy individuals when under the influence of some severe excitement, such as the patient whom we have just examined shows. It is a remarkable fact that this trouble is seldom met with in genuine local changes: inflammations and ulcerations run their course without producing relatively severe symptoms.

Lastly, paræsthesia of the throat sometimes accompanies the first stages of bulbar paralysis and paralysis of the sensible and motor tracts of the pharynx and larynx. These are accompanied by numbness, dryness, and formication.

Hyperæsthesia of the pharynx and larynx is that increased irritability which is caused by a demonstrable peripheral irritation. An irritation may, therefore, cause a common but increased perception, which may be felt as pain or which may be accompanied only by reflex manifestations.

Hyperæsthesia of the throat can be present without any discoverable change of the organic structure. It is sometimes so excessive, that, not only when the mucous coat is touched, but even when it is only approached, an unpleasant sensation and severe reflex action (gagging, coughing, vomiting), are produced.

I have been unable to satisfy myself that this idiopathic hyperæsthesia is oftener met with in fe-

males than in males, as some inquirers maintain. I can, however, confirm the observation that it accompanies many physiological actions, such as dentition, menstruation, and pregnancy. In such cases it develops itself with the beginning of these actions and disappears with their ending. Violent emotions are also able to produce hyperæsthesia. Most frequently hyperæsthesia of the throat and larynx is caused by the local affections of these organs. Catarrhal, phlegmonous and erysipelatous affections are always accompanied by a more or less sensitive condition of these organs.

Ulcers and changes of a tuberculous nature are also sometimes accompanied by hyperæsthesia. On the contrary, it is generally missing in syphilitic ulcers and in neoplasms, benign as well as malignant.

Phthisis pulmonalis is also sometimes combined with an excessive hyperæsthesia of the pharynx and larynx, without any particular change of the mucous membrane of these parts. Neuralgia of these organs is very rare.

Anæsthesia of the pharynx and larynx is characterized either by a diminution of the normal sensibility, or by a loss of the perception of pain. The first form is not always positively a pathological one, because the sensibility may, under normal conditions, be very poorly developed. A safe criterion in such cases is the coexistence of motor neuroses, or some other affection of the nerves of these organs, with the anæsthesia. The symptoms of the severer forms of anæsthesia of these parts vary according to the nerves affected. Sensible paralyses of the recurrents cause the least inconvenience; those of the superior laryngeal nerves, however, give rise to serious trouble. Owing to the paralysis of the thyroid and aryepiglottic muscles the opening into the larynx is not properly closed during deglutition; at the same time the mucous membrane of the entire region is insensible, and so it happens that food is easily forced into the larynx, and through it into the bronchi, until it reaches a more sensitive part of the mucous membrane and gives rise to very severe paroxyms of coughing. If we examine the patient with the laryngoscope we will find the epiglottis upright and the mucous membrane somewhat reddened, owing, probably, to the repeated irritation produced by foreign substances. The membranes can be touched without producing any reflex action and without pain. The same condition is found in paralysis and anæsthesia of the pharynx. In these cases swallowing is often very difficult, or the food may be ejected through the nostrils. The anæsthesia may be uni- or bi-lateral, and it may be more complete on one side than on the other. The patients often complain of a sensation of formication, burning, tickling, etc., and even pain may be felt (anæsthesia dolorosa).

Anæsthesia of the pharynx and larynx is most frequently seen in connection with hysteria. Less complete but relatively often it is found with anæmia and chlorosis. As a constant symptom it is also found during epileptic paroxysms, and during the asphyctic stage of asiatic cholera. It may also be produced by certain medicines; especially the narcotics when applied either locally or given internally; also by bromide of potassium. It has long been known as a sequel of diphtheria; it is developed in from one to four weeks after recovering from this affection, and may be complete or incomplete, uni- or bi-lateral, and more or less circumscribed.

If now, gentlemen, we try to explain the pathogeny of these affections we must remember that they are undoubtedly symptoms of an abnormal irritability. Such an irritability can be produced by a great variety of irritants.

For the sake of brevity I will call those irritations which are produced in the periphery peripheral, and those which are of central origin, central.

Paræsthesia can be caused by an irritation of the central organs; this is the case in hypochondriasis. Here the irritation is entirely a psychical one, for we fail to find any change in the peripheral organs or their nerves. The simple idea which is transferred under the influence of the consciousness of a strong intention of the mind to the periphery is strong enough to produce the most variable sensations in the pharynx or larynx.

In this manner emotional excitement may give rise to paræsthesia. Here the intention of the mind is momentarily directed to these organs by some accident, and the simple idea is changed into an apparently real perception, which perception in turn again acts as an irritant, and changes the momentary disposition of the mind into a permanent one.

Whether the seat of the irritation is central in those paræsthesias which accompany anæmia and chlorosis cannot be positively stated, but this seems the most probable, as the deficient nutrition of the central nervous system can give rise to false perceptions in the pharynx and larynx, while, on the contrary, anæmia of these parts will not produce them.

So, too, those paræsthesias which are referable to a very slight peripheral irritation may be

classed as central, because the peripheral irritation may be only an opportune one, and the real source may be central in origin. It is the fear which most persons have of swallowing pieces of bone, glass, etc., which causes them to convert a very slight irritation into the most extreme pain. On the contrary, the irritation is produced in the periphery, when the paræsthesia is the direct result of some local lesion which is proportional to the sensations produced. The irritation is peripheral which produces those paræsthesias which accompany the beginning of destructive processes in the lungs.

Of the localization of the irritation in hysterical paræsthesia I can say nothing positive. The fact that hysteria may be produced by both peripheral and central disturbances makes it probable that the origin of hysterical paræsthesia of these organs may also be either central or peripheral.

The pathogeny of hyperæsthesia of the pharynx and larynx needs but a few words after what I have said of paræsthesia. In those cases in which it is idiopathic, it may be regarded as one of the symptoms of some general affection. It may also have a local cause, which, indeed, is not always demonstrable, but we have seen that this effect may be produced by a rapid succession of touches or by inflammations.

Anæsthesia is generally produced by a material change in the nervous apparatus of the parts. We must seek the cause in the spinal centres in those cases in which our affection is only a symptom of a cerebral or spinal disease. Anæmic anæsthesias are also probably of central origin. On the contrary, the anæsthesia which follows diphtheria seems to be of peripheral origin.

The prognosis of the paræsthesias is generally favorable, although it should generally be cautiously stated. The same can be said of hyperæsthesia, and also of anæsthesia, but an extreme degree of anæsthesia of the larynx may be dangerous, because foreign bodies may, at any time, enter the air passages and thus cause death.

The therapeutics of these affections must be directed against the affections which they accompany. Only when the primary illness is incurable, or when the sensibility neuroses are independent of other troubles, is it necessary to direct our efforts against them *per se*.

Paræsthesia may sometimes be subsided by having recourse to delusive measures with the object of producing a psychical effect.

Hyperæsthesia requires especially a local treatment. Astringents, in the form of gargles and inhalations, painting with solution of potassium bromide, hydrate of chloral and morphia, are beneficial.

Anæsthesia of the pharynx and larynx being generally self-limited, needs little treatment unless it becomes very complete; in such cases care must be taken that life is not endangered by the introduction of foreign bodies into the air passages. Food should, therefore, be given through an œsophageal tube, care being taken in its introduction, so that it does not enter into the larynx.

Of internal remedies strychnia is especially beneficial. Electricity, in the form of the constant or induced current directly to the affected parts, is also beneficial.

Communications.

REMARKS ON THE IMPORTANCE OF ANAL FISSURE IN THE TREATMENT OF DISEASES OF WOMEN. PART II.

Read before the Allegheny County Medical Society, May 17, 1881,

BY R. STANSBURY SUTTON, A.M., M.D.,

Of Pittsburgh, Pa.,

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Gentlemen—In the spring of 1879 I read before you a paper under the above caption. This paper received your approbation and was published in the Medical and Surgical Reporter, of Philadelphia, June 7, 1879. Its publication was followed by letters of commendation from professional brethren of high station, east and west, from whom came the request for another paper on the same subject. Finally the paper was republished in Germany, in *Virchow and Hirsch Jahresb. f Bd.*, pp. 344, 347 and 348. Having now devoted two more years to the study of gynæcology I have collected many cases in which an anal fissure was the chief factor in numerous pathological problems. Among these patients the following maladies were seen and treated:—

Vaginismus, spurious ovaritis, neuralgia in ovarian region, pains along the sacrum and spine, and such hystero-neuroses as the first paper treated of. Irritability of the bladder, simple and complicated with hyperæmia of the lining membrane, mucosa urethræ, with prolapse of the same at the meatus externus.

In many cases the engorgement of the rectum and colon with fecal matter has produced pelvic congestion, uterine displacement, leucorrhœa, and given the patient that symptom so prevalent, *bearing-down pain*. My attention has been for-

cibly attracted to a cause of this malady which you will not, so far as my knowledge goes, find in text-books treating of the subject. It is this, that anal fissure is a very common result of partial laceration of the female perineum.

Vaginismus.—This term was applied by Marion Sims to an irritable spasmodic condition of the external sphincter vaginæ and its associate, the pubo coccygeus, one or both muscles being involved. I omit any mention of its history or the operations devised for its cure—but will inquire why an anal fissure will produce so painful and inconvenient a phenomenon as vaginismus.

The superficial sphincter vaginæ muscle begins at the centre of the perineal body. Its fibres are continuous with those of the sphincter ani externus, the two forming a figure of 8. The lateral halves of the sphincter vaginæ externus are inserted above into the crura, or cavernous bodies of the clitoris. The deep sphincter vaginæ, or sphincter internus, is the pubo coccygeus. It arises from the pubic rami and surrounds the vagina; a triple division of its fibres are lost in the perineal body, vagina and rectum, and the coccyx forms its alternate attachment. But the source of the nervous supply to the sphincters ani, sphincters vaginæ and clitoris, is the same, viz., filaments from the sympathetic and filaments from the spinal system by division of the pudic branch of the sacral plexus. To be more explicit. The *pudic nerve* is an offshoot from the sacral plexus; its inferior hemorrhoidal branch is distributed to the sphincter ani and lower part of the rectum, its *anterior* and *posterior* superficial branches go to the vulva and sphincters vaginæ, while a branch ascends to surround the clitoris with a "nervous sheath." Now apply the law of reflex action, remembering that "the great sympathetic is endowed both with sensibility and the power of exciting motion." The law of reflex action is, "that it originates from a sensation conveyed inward to the cerebro spinal centres, and is then transmitted outward to its final destination through the medium of one of the sympathetic ganglia." All the muscles, including the clitoris, are supplied with sympathetic filaments, as well as the filaments enumerated from the cerebro-spinal system. By the law, then, we can consistently deduce the following proposition: *Any irritation applied to the sphincter ani muscle will or may produce reflex phenomena.* For example, irritation applied by fissure to the sphincter ani will or may produce spasm of the sphincter vaginæ, either of the sphincter superficialis or sphincter profundæ, or both. And by the same law we infer that irritation of the clitoris will or may produce contraction of either the sphincters ani or sphincters vaginæ, or all. Allow me to now present a case illustrative of this theory:—

On June 16th, 1880, my friend, Dr. Wm. H. Daly, the president of this body, sent to me, for treatment, Mrs. H., aged twenty-seven years, married, with a laceration of the perineum extending down to the sphincter ani muscle. Two days after, in the presence of Drs. Daly and Rankin and my nurse, I closed the perineum with six silver sutures. Union by first intention followed, and at the end of a month she went to the mountains. On the 12th of October following she re appeared at Dr. Daly's office and complained that I had sewed her up so tight that sexual intercourse was impossible, although she had done her best to accomplish it. Dr. Daly sent her back to me, and an examination revealed a fissure of the anus, probably overlooked at the time of the operation, an exceedingly opportune time to have effected its cure. I cured her fissure in a few days, after which she experienced no difficulty in the sexual act.

Spurious Ovaritis.—Frequently associated with anal fissure there is pain in the region of the ovaries; usually the left side is the one complained of, a fact doubtless due to the propinquity of the left ovary to the rectum. The pain may arise from the direct irritation of hardened fæces, or by reflex action from the irritation of the fissure itself. We have seen that to the sphincters are distributed filaments from both the cerebro-spinal and sympathetic systems. The filaments of the latter system arise from the hypogastric plexus, which is intimately connected with the renal plexus, from which the ovaries are supplied. In this form of disease, *spurious ovaritis*, we may have associated a dysmenorrhœa. This, because the ovary is more sensitive as its periodical physiological hyperæmia approaches and continues. Pain is, therefore, present in an increased ratio before the menstrual flow appears, and continues after the flow has advanced, and indeed, until the ovarian hyperæmia has disappeared. Such cases are more frequent than I formerly supposed. The following is illustrative:—

Miss M. A. E., aged thirty-five, single, presented herself for treatment February 5, 1880. She has dyspepsia, cough, anæmia, backache, leucorrhœa, constipation, anorexia, insomnia, and marked pain in left ovarian region, and pain coming on after the bowels are moved.

Inspection reveals an anal fissure, and a small hemorrhoid.

February 13, 1880, forcible dilatation of the

sphincter ani and ligation of the hemorrhoid was practiced. A cure was the result.

May 1, she looks well, has fair color, and has gained seven pounds in weight. Her pain in left ovarian region disappeared after the operation.

Irritability of the Bladder, with resulting hyperæmia of the urethral lining membrane, is also a result of anal fissure. By the reflex law of sympathetic irritation the bladder is soon disturbed—frequent micturition, with congestion of the urethral lining and the subjacent cellular tissue results in excessive development of the tissues. The duplicatures increase, and are crowded forward, until prolapse at the external meatus results, the fold here exposed to atmospheric air becomes sensitive and an additional cause of reflex phenomena. The constipation in fissure cases is an important factor in the development of this condition. Tenesmus is apt to be present, and the patient persists in efforts to pass water after the bladder is empty.

In illustration, on December 17th, 1880, Mrs. Mary H., resident of Pittsburgh, came to my office for advice. Her appearance was haggard, and the evidence of suffering was patent in her countenance. She was aged thirty, menstruated at thirteen, married at fifteen, was a mother at sixteen. Never has been pregnant since. Six years after the birth of her child she acquired an irregular habit as to daily movement of her bowels. Soon after began having irritable bladder, tenesmus, backache and pain in the left groin. Has been treated *in extenso* for uterine disease. An examination fails to reveal any uterine disease. She affirms that sexual intercourse has been long avoided, by reason of pain "in the front."

The urethral mucous membrane is swollen and pouting at the meatus. The edges of the latter are very sensitive. After passing water or emptying the rectum she suffers pain, often lasting for an hour. I omitted to examine the rectum, and for seventeen days applied to the entire length of the urethra, once every day, Kennedy's Extract Pinus Canadensis, and gave her laxatives with boracic acid.

On January 3, 1881, the urethra was apparently free from congestion, but the irritability of the bladder persisted. A reëxamination was instituted, stone was eliminated, but when the rectum was examined a fissure was discovered. On the following day forcible dilatation of the sphincter ani was practiced, and in a week the patient was discharged cured.

Fissure patients are, in my experience, habitually constipated; the movement of the bowels is never free or complete, but impeded by the spasm of the sphincter muscle; residual fæces remain, the rectum and colon become engorged. The mechanical pack acts like a tourniquet on the veins, and the blood is held back in the pelvis; the result is a constant hyperæmia. The pelvic cavity is encroached upon, and the cervix and body of the uterus is crowded toward the symphysis, and, in turn, by malposition, anal fissure increasing the impediment to the already crippled circulation, the vagina and uterus and urethra become hyperæmic; leucorrhœa, vaginal and cervical, will now appear.

Sooner or later, through the medium of the hypogastric plexus, the functions of the stomach and lower digestive tract, with its associate glands, become disturbed; meanwhile over-distention with fæces and gas have impaired the muscular force of the colon. Reflex irritation will now pervert normal spinal sensibility into irritability, with often accompanying cephalalgia, and, to crown the picture, hysteria "hangs over all." Such a patient I have seen, morbid and reticent, retired and gloomy, plagued by thoughts of eternal damnation, and hopeless, in the present or future, until cured of her anal fissure. But time admonishes that I must finally redeem my promise in reference to a new cause.

It is this: *Partial Laceration of the Female Perineum.* In my first paper I stated that I had found seven cases of fissure in the female for one in the male. I can now tell you that in unmarried and sterile women fissure is scarcely more prevalent than among men. But in women who have borne children and who have sustained partial laceration of the perineum, the affection is very common. Why? Because the female who has lost the perineal body has lost much of her power to unload her rectum, and will suffer from constipation, which will often result in fissure.

Why has she lost this evacuating power? The perineal body, a wedge between rectum and vagina, supporting both, is gone. The support given by the body, antagonizing the diaphragm and abdominal muscles is lost. This body, the antagonistic force of which is so essential, has been dissolved by a separation at its former centres of the transverse perineal muscles, and by the detachment of a tolerably fixed point of a portion of the levatores ani, the office of which is, during fecal evacuation, to shorten the rectum and to antagonize superior forces. A female thus crippled will suffer from constipation, pelvic hyperæmia, hemorrhoids and fissure;

this, in turn, to hurry her on into a condition calling for both your skill and sympathy.

PRACTICAL NOTES ON OSTEO-MYELITIS. THERAPY AS ALLIED TO OSTITIS AND PERIOSTITIS.

BY GEO. HALSTED BOYLAND, A.M., M.D.,
Of Baltimore, Md.

Studious personal observation, based upon well stored clinical experience, will enable the surgeon to lay down for himself such rules regarding ætiology, diagnosis, and therapeusis of the diseases he may be called upon to treat, as will serve him better than volumes of authority simply as authorities. This is not a plea for empiricism. Only after thorough schooling in the regular way, only after a sound study of all the very best standard works, will the professional mind be fitted to judge for itself, to leave the beaten track and enter that more independent mode of thought and practice which has so often restored sufferers to health and been productive of great gains to science. It is from this standpoint that the writer views osteo-myelitis as a disease of far more frequent occurrence than has generally been admitted up to the present time, so frequent, in fact, that it often loses its individuality as a disease per se altogether, and becomes a complication or secondary pathological process in certain affections of the bone.

Inflammation of the marrow of the bone has first been described in more modern times, but evidently had been already observed in earlier centuries. In a work edited by Viany,* near the end of the seventeenth century, are found, in this respect, two highly remarkable observations.

1. A man 30 years of age received a severe blow on the front side of the tibia. At first it appeared to be a question of only an ordinary contusion. But on the seventh day he was suddenly attacked by rigors that returned at irregular intervals. His skin became icterous and he died. An abscess of the liver was found, post-mortem, and beyond this a collection of pus in the cells of the spongy tissue of the tibia, which was caused by the congestion.

2. During the siege of Namur an engineer received a gunshot wound in the lower part of the leg, by which the bone was shattered. The ball could not be extricated and he died. The autopsy discovered suppuration in the condyles of the tibia and an abscess of the liver, "so that," says the author, "it can collect in the bone cells, where the matter can have no outlet at all."

Probably the lungs were not examined in either case, although Petit gave utterance to the opinion that a metastasis in the liver having gone out from a bone, a metastatic deposit of pus might take place in the lungs, going out from the fibrous tissue.

In a strictly anatomical consideration, osteo-myelitis proved to be a very frequent disease, as inflammation of the bone without any affection of the marrow does not, in general, exist. From a practical surgical point of view, however, only those cases will be designated as osteo-myelitis, in which the inflammation of the marrow is the most prominent feature, which is preferably the case in such bones as contain masses of marrow sufficiently large to be plainly distinguished by the eye, namely, in the diaphyses of the hollow bones. The following notes will be confined to acute osteo-myelitis of this nature only.

Ætiology.—With ostitis and periostitis so intimately related pathologically to osteo-myelitis, the causal factors would, at first sight, seem clear; nevertheless, the ætiology of osteo myelitis is, in many cases, dark (spontaneous form). In other cases a wound is discernible (traumatic form). In this place belong sawing through the bone in amputations and resections, fractures, especially complicated ones, at times those in which splinters broken off the cortical substance have pressed into the hollow of the bone; or contusions of the marrow, brought about in other ways. But often enough the most severe wounds of the bone run their course without the appearance of osteo-myelitis. In a very large experience that I have had in complicated fractures from gunshot wounds, this has usually transpired, as if fractures from gunshot alone enjoyed immunity from osteo-myelitis. On the other hand, slight contusions and simple concussions are sometimes followed by osteo-myelitis, the causes of which can then be sought in an especial predisposition, or in a *genius epidemius*. With reference to the morbid anatomical changes that take place, it will be observed that in the beginning the bone marrow assumes a dark-red color, and becomes more consistent than in the normal condition. Later, pus is found in it; further on it takes a yellowish-gray tint, until, finally, a complete abscess, or, more often, an infiltration of pus, is developed. Separate parts of the marrow become gangrenescent, by which the fat that is set free from the fat-cells, rent asunder, collects in small drops. If it is an amputation stump, the marrow under pressure of the pus oozes forth from the bone where sawed off. The appearance of such an oozing

* Cours du demonstrateur, royal de St. Come. Jean Louis Petit.

can also take place, when, out of the exposed bone marrow (as sometimes happens) true granulations grow up. Simultaneous with the inflammation of the marrow, the periosteum is detached from the outer surface of the bone by consecutive periostitis purulenta, ordinarily, to the extent to which suppuration is present within the bone. The portion of bone lying between undergoes changes also; the supply of blood is cut off from it on both sides, as the blood vessels running into it are either obliterated or disturbed; and it, therefore, as a rule, becomes necrotic, provided that the patient does not succumb before. Round about the necrotic piece a new growth of bone generally takes place. Ordinarily, inflammation of the nearest lying joint accompanies osteo-myelitis when the same is not entirely circumscribed, but when more extended, inflammation of both joints in whose formation the diseased bone takes part. Mostly serous exudation, seldomer formation of pus or ulceration, develops in the affected joint. If in youthful individuals the epiphysis and diaphysis are not yet united by bone substance, osteo-myelitis of the diaphysis generally causes a suppuration or ichorous loosening off of the epiphysis. But this is by no means always the case; on the other side, inflammatory loosening off of the epiphysis does not necessarily presuppose osteo-myelitis.

Without devoting more space to that much neglected subject, morbid anatomy, the remainder of this article will be given to those points which the practical surgeon will at once seek for. It is, nevertheless, to be regretted that the American practitioners, as a class, lavish earnest attention and deep study upon therapeutics, surgical appliances and operations, while they are content to let pathology take care of itself, or at most, to give it only a hurried reading.

Symptoms and Course of Osteo-myelitis.—The symptoms of osteo-myelitis are in many respects obscure. Moreover, when the diseased bone is not exposed it is often quite impossible to distinguish it from ostitis and periostitis. If an amputation stump is affected with this inflammation, the oozing of marrow from the cut surface of the bone is the surest symptom. However, the ichor and pushing off of the marrow plug often occurs so quickly that instead of a plug hanging forth, a depression covered with suppurative or ichorous mass is found in the place where the interior of the bone was cut through. The whole amputation stump, as a rule, becomes œdematous and hard, and the loosening of any union that may already have taken place in the wound affords the possibility of inspecting the bone itself.

If the bone whose marrow is inflamed does not lie exposed, as notably, in cases of spontaneous osteo myelitis, stress must be laid upon the subjective symptoms. These patients complain of very severe, fixed pain in the depth of the limb, that soon becomes more extended (radiates), being sensibly increased by the warmth of the bed, and that cannot be relieved by any treatment, not even by deep incisions. The subjective sensation of weight and the impossibility of motion in the diseased part are more positively defined than in ostitis, and are just here especially characteristic. Presently, with very high fever, mostly inaugurated by rigors, all the other symptoms of inflammation of the bone and periosteum make their appearance; the soft parts in the vicinity of the seat of inflammation are affected to a large extent by a hard œdematous swelling. *The course of osteo-myelitis* is generally rapid. Its usual result is suppuration, and its consequence pyæmia. A point is now reached at which there is an entire change in the symptoms and course of the disease, and a consultant being called in at this juncture, unacquainted with the origin of the present trouble, would unhesitatingly pronounce in favor of purulent infection, pure and simple. The recurrent chills, the icterous color of the skin, the typhoid condition of the patient (from this, undoubtedly, the name applied in various significations, "typhus des membres,)" are symptoms that do not indeed belong to inflammation of the bone marrow as such, but to the fever, the pyæmia. In the ordinary course of the disease, purulent infection then brings the patient, with great rapidity, to death; otherwise, inflammation is developed in the neighboring joints and in the surrounding soft parts; finally, necrosis of the bone in the region of the diseased marrow.

Undoubtedly, cases do occur in which the osteo-myelitis runs a more mild course to a favorable result. Then the at first always high fever moderates, the topical characteristics disappear gradually, but soon entirely, and the further course of the disease is in no way distinguishable from that of a chronic inflammation of the bone. On amputation stumps, after favorable result of such an osteo-myelitis, we find ring-shaped necroses, that is, bone cylinders loosen themselves off, which present upon the saw surface a ring containing the entire thickness of the bone, but further upward become steadily thinner, until finally they consist only of the layer bordering directly on the marrow hollow, or, in other words, forming the interior of the bone.

Osteo-myelitis will at once be recognized as a

grave disease; therefore, without dwelling upon prognosis, the department of therapeutics will claim attention.

Treatment.—It will readily be deduced from the foregoing that the pathological relation existing between ostitis, periostitis and osteo-myelitis is such as to indicate a therapeusis to be conducted upon the same general principles for each and all. In order, therefore, to arrive at the best method of handling osteo myelitis, it is proposed to glance at the most approved treatment of ostitis and periostitis.

Ostitis.—In the treatment of *inflammation of the bone*, then, only inner medicines are demanded if the inflammatory process rest upon a constitutional disease, such as scrofula, syphilis, scurvy, rheumatism or gout. The well known remedies, a list too long to be enumerated within the prescribed limits of a single article, will be found of great value, especially the salicylates in gout and rheumatism. I usually determine what kind of topical treatment to employ by the degree of inflammation existing.

It will seldom be necessary to make a venesection on account of traumatic inflammation of the bone; it is more likely that the great capability of being wounded, and importance of near lying organs, such as the brain, the lungs, spinal marrow, large joints, might demand it. The usually slow course of ostitis certainly indicates local treatment, a position of rest for the affected part, ice, cold irrigations, oft repeated cupping, leeches. The topical drawing off of blood should at first be repeated every three or four days, later at longer intervals; particularly when hardnesses or thicknesses remain, is benefit to be derived from the employment of iodine, salves, fly blisters, mercurial plaster, alkali and sulphur baths, volatile embrocations; but before all, antispasis by means of a seton or fontanel directly over the portion of bone covered with thickened soft parts. As a rule narcotics should only be exhibited as a last resort in the most intense pain.

Even the large doses of the bromide of potash are often successful, especially combined with hydrate of chloral. Hydrate of chloral alone is preferable to opium or its alkaloids. Both the bromide and the hydrate possess this advantage, that they do not constipate; the torpidity of the bowels induced by other narcotics is a decided objection to their use in a disease where it is very important to keep the bowels well regulated. The diet should be bland and restricted at first, so long, in fact, as any signs of congestion and much fever remain; when these diminish and the case assumes a chronic aspect, strengthening food with quinine and steel are indicated.

If the bone is entirely exposed for a distance, either by a flap wound, loss of substance, periostitis, suppuration, or by any other means, nothing is more rash than to suppose that it must necessarily become necrotic in its superficial layers, and therefore be given up. On the contrary, this portion of the bone must be kept moist, with the greatest care, by cataplasms or bandages wet with mild oils and salves; the main point in the treatment of exposed bone is to protect its surface from an evaporation that may easily result in dryness of the superficial layers, which would then certainly end in necrosis. Having taken the bone as a pathological basis with reference to periostitis and osteo-myelitis, this order seeming to me to be a natural one, from the anatomical position of the parts, the *treatment of periostitis* now presents itself.

In acute periostitis, at the beginning of the disease, a general and topical antiphlogistic treatment is demanded, according with the intensity of the inflammation. Above all things the application of ice externally, with bits of ice given per orem, are most strongly recommended. The best plan and the only one through which the frightful pain can be quickly alleviated, and in many cases even the necrosis of the bone also prevented, is to make a deep incision in the limb, down through the periosteum. In a periostitis of the fingers no experienced physician would hesitate to employ this remedy at once. The uncertainty of the diagnosis, perhaps also the want of sufficient self-confidence in operating, keeps some from putting this procedure into practice when the periostitis has its seat in the femur. But in this locality, just as in the other, the only cure to be expected is from incision. The after-treatment resolves itself into that of a suppurating wound.

Periostitis, like ostitis, or, as it is sometimes called, *osteitis*, often loses its acute type and goes over into that longer and more mild course, briefly known as chronic. It is then that a steadily continued antiphlogistic, discutient treatment, and one that is most likely to induce resorption, ought to be employed. In handling any of these affections, of course, the practitioner will carefully regard any dyscrasia that may be lurking about the system.

Conclusion—Treatment of Osteo-myelitis.—*Repetitio est mater studiorum;* and as a truly professional man is always a student, even this trite phrase will hardly be necessary by way of apology for any repetition that may be made in asserting that the treatment of osteo-myelitis

must, in general, be the same as that of ostitis and periostitis. The most prominent point here offering is the question of the *incision*, so efficacious in periostitis. But the diagnosis of an osteo-myelitis, in the great majority of cases, will seldom be fixed early enough, and with sharpness enough, to warrant an incision (analogous to that in periostitis) reaching down into the hollow of bone, in order to procure free outlet for the pus.

Such an operation would invariably cause the bone to be exposed, and if exposed already, still more so, and this, as well as cutting through the bone itself, would be the causes of a new osteo-myelitis. For this reason the incision will be abandoned, and our treatment become restricted to the removal of any recognizable causes, such as splinters and foreign bodies, followed by a topical antiphlogosis. Among the medicaments to be exhibited now, cold is most praised. Cold applications, ice bags, cooling saline drinks and bits of ice given by mouth during the fever. Blood-letting is to be avoided, in view of collapse that may supervene later on and only too easily. In affections of this nature I have found painting the diseased parts with tincture of iodine, made stronger by the addition of iodine, of great value. Its power as a counter-irritant in relieving pain, its action as a discutient, fit it particularly for application in osteo-myelitis. To the officinal tincture of iodine as much iodine again as it already contains should be added. The, what might seem, superfluous addition of iodine certainly does not become soluble, but it can be easily held in suspension by shaking, and the working of this tincture of iodine "*fortior*" is undoubtedly stronger than that of the officinal tincture of iodine, the suspendent particles settling directly on the skin surface and causing a slightly blistering process in cases of spontaneous osteo-myelitis.

The free and early incision so imperative in periostitis, and extending down to the bone, does not possess any advantage then, here; on the contrary would only do harm, as it would allow the entrance of air to the œdematous infiltrated soft parts, and, as a rule, bring about ichor in them. Nevertheless, incisions in the soft parts, for the purpose of emptying pus collected in or under them, are recommended here, as everywhere. It is doubtful if anything is to be gained by amputation when the symptoms of pyæmia set in. At all events the whole diseased bone must always be removed, in other words, exarticulated. In this manner comparatively good results have been obtained by I. Roux. The patient's condition will require tonics and strengthening diet, with attention to the bowels and general hygiene. In restlessness and insomnia, during the course of the disease, doses of a solution of the bromide, iodide and nitrate of potash, in equal quantities, will be found to act kindly. Stimulants in moderate quantities, well diluted.

In bringing this article to a close the writer takes pleasure in calling attention to the absence of authority, and to the fact that the modes of treatment herein suggested are in many respects entirely his own, and such as common sense and experience have shown to be the best, at the same time always such as have been in accordance with the teachings of science.

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

Service of Prof. D. HAYES AGNEW, May 25th, 1881.

Reported by Guy Hinsdale, M.D.

Case I.—Hydrocele.

This patient, an old man, has a swelling which occupies the whole of the right side of the scrotum. The swelling is pyriform. It began at the lower portion of the scrotum and increased upward, and has extended to the external abdominal ring. It stands out from the pelvis; it does not fall down beside the limb. It is irreducible and does not disappear under manipulation. Tested by light it is translucent. We have, therefore, hydrocele; and yet, in spite of all these facts, it has been treated for a year as a case of chronic orchitis! It is astonishing that such a mistake could have occurred. Such a blunder is inexcusable when we have the light test, which in a moment shows its translucency, and when we have the grooved needle, which would instantly have revealed the presence of serum. He comes here for treatment and wants to be permanently cured.

You all know what hydrocele is. It is an accumulation of a serous fluid in the tunica vaginalis. This fluid is almost always coagulable. We will draw off the contents of the sac and inject the tincture of iodine, as you have repeatedly seen done at this clinic, and which almost invariably effects a cure. Two drachms of the pure tincture are usually sufficient, but in this case I will use three drachms and allow it to remain in the sac. The inflammation that results is not so very intense, and on the fourth or fifth day begins to subside.

In tapping the hydrocele, first grasp the tumor with the left hand, making the skin tense; then, taking care not to wound the testicle, which is situated above and at the back part, push the trocar and canula directly into the sac.

When we have a healthy testicle and a healthy sac wall the fluid is of a light color, as you see here. Occasionally, however, the fluid is dark colored, a condition which is due to the presence of disorganized blood corpuscles, and, when not

the result of injury, is often associated with a diseased condition of the vaginal tunic or of the testis. The hydrocele, in such cases, is generally the effect and not the cause of the glandular trouble. If you have a large testicle, never inject anything to cure the hydrocele.

After emptying the sac completely, the testicle should be examined, to discover if there is any enlargement, or undue sensibility, which might render it improper to attempt a radical cure. Upon finding nothing of this nature we inject through the canula three drachms of the pure tincture of iodine, and by manipulation we bring it in contact with the opposing surfaces of the sac. The canula is then withdrawn and the iodine is retained. Pain is experienced along the cord and often in the loins. By the third day you will find the swelling almost as great as before. Keep the patient quiet, place something under the scrotum and give it the requisite support, and if his pain continues long and is very severe, he should have a quarter of a grain of morphia. In a few days the size of the swelling will decrease *pari passu* with the decline of the inflammation.

You will generally be able to suspect failure in the operation when the inflammatory exudation is thin. When it is thick, you may know that the operation is going to succeed.

Case 2.—Hydrocele.

This is a similar case in a younger subject. He is nineteen years old. Tested by transmitted light the tumor is found to be translucent. The trocar should always be sharpened after every second operation. If it hitches a little it is not in the best order. As I thrust in the trocar and canula and withdraw the trocar a clear serous liquid flows out. This lad comes from Allentown. It is not well to let a patient travel to his home after even so simple an operation as this. It used to be done; it was done in London, and by Sir Astley Cooper.

Always make the patient cough, as you saw me do, to see if there is a hernia complicating the hydrocele. In this case the pain is much more severe than in the previous one, and he cries out. At the end of seven days the patient may sit up, and in four or five weeks the cure will be complete. Sitting up does no harm, provided the scrotum is well supported in a suspensory bandage.

Case 3.—Infantile Hydrocele.

Here is another swelling, occurring this time in a child two years old, but in the same locality. It also stands out prominently from the body. The child's crying helps us in the diagnosis. If it is simply a hydrocele the distention will not increase when he cries. I will see if it is reducible, and I find that it is not. Congenital hydrocele is a rare affection, although it is stated in some books to be very common.

In this form of the disease the tunica vaginalis is often not sharply separated from the abdominal cavity, but it is continuous with it. The investing prolongation of the peritoneum adheres sufficiently close to the cord, in most instances, to allow only of the accumulation of the fluid which constitutes the hydrocele; intestines and omentum do not usually descend.

As the child is etherized, a hernia becomes apparent, from the intense struggles.

This hydrocele is to be treated very differently from the other cases that we have seen to-day. In congenital hydrocele injections would be dangerous because of the continuity of the vaginal tunic with the abdominal cavity. The patient might perish from the consequent inflammation. Infantile hydrocele may be treated by several methods. You may use the expectant plan. It is not uncommon in young children for the fluid to be absorbed. Applications of solutions of iodine or of muriate of ammonia may aid this process. Again, you may treat the hydrocele by puncturing it with a sharp-pointed bistoury and evacuating the fluid. After this a portion of the tunica vaginalis should be seized with the forceps, drawn through the wound and snipped off with a pair of scissors. Finally, infantile hydrocele may be treated by the seton. This is a method which I regard as very satisfactory, and it is applicable to all varieties of the disease. I will employ it in this case. I puncture the sac with a sharp-pointed bistoury, and along the blade of the instrument I introduce a needle armed with a single silk thread, and I bring it out through the skin of the scrotum. The knife blade makes an excellent director, and we are sure of getting into the sac.

One loop of the seton is abundant, it serves to drain away the serum and to develop sufficient inflammation to cure the disease. The thread should never be allowed to remain in over thirty-six hours, for it might be followed by an abscess. We will tie the silk with a large loop, in order to allow for the swelling that will follow.

Case 4.—Fatty Tumor.

This colored man comes with a large tumor of the shoulder. It is pendulous, and moves freely under the hand; when I pinch it, it falls into dimples and depressions. There are a number of lobes or masses fastened together.

These fatty tumors are harmless, but they may grow to an enormous bulk. An aged woman came into my office, on one occasion, having what I supposed to be a peddler's pack strapped across her shoulders; I thought she had come in to sell something. Upon removing her clothing she exposed an enormous lipoma, suspended in a bag, and, on withdrawing the support, it hung down almost to her loins.

In the treatment of these growths nothing avails but to remove them by the knife. Fatty tumors of the back are rarely found very movable or encapsulated; in other parts of the body they may often be easily enucleated.

After removal they do not, as a rule, return, but sometimes you see a sarcoma start up from the very bed from which an adipose growth has been excised.

I am confident that the development of these growths is associated with irritation of the skin and subcutaneous tissue. They occur everywhere except upon the palms of the hand and soles of the feet, although I have seen one case of such a tumor in this last region.

Case 5.—Varicocele.

This patient has, as you see, a varicose condition of the veins of the scrotum, but that, alone,

does not constitute varicocele. We find, however, that the veins of the cord are increased; as I feel them, they seem like worms rolling between the thumb and fingers. He says that it is only an inconvenience. You see that the scrotum is a little longer now than when he first came in. He complains of a dragging weight from the pubic bone, a sensation which traction on the cord is sufficient to produce. This is a slight case and a suspensory is the only thing required. There is here no change in the testicle. In many cases of varicocele, especially in persons of mature life, the disease remains stationary, or makes such slight progress as to demand little, if any, attention. When, however, the patient complains of severe pain in the back and an uncomfortable sense of dragging weight, or when the testicle begins to soften and atrophy, the question of operation must be considered. The application of cold water two or three times a day will impart tone to the dartos and cremaster muscles and stimulate them to contractility, and in this way contribute much to palliate the symptoms.

The structural changes which occur in bad cases of varicocele affect both the spermatic veins and the testicles. The walls of the veins present a knotty appearance, due to inflammatory infiltration; at other parts the venous coats may be markedly attenuated. We find, also, occasionally, phlebolites in the cavity of these vessels. The sluggishness of this circulation in the venous trunks necessarily deprives the testicle of that free interchange of blood which is essential to its proper nutrition; consequently, the testis becomes soft and frequently atrophies to a greater or less extent.

There are cases of varicocele in which the physical inconvenience leads to great disturbance of the patient's mind. When they see the scrotum hanging down, and suffer this constant, dragging pain, they become depressed, and great fears are entertained that their virility will be destroyed. There is no amount of persuasion that will convince such a patient that the affection is not serious; he is disqualified from any pursuit, and evil forebodings haunt him like a spectre, day and night. When such a case presents itself, a few words of explanation and encouragement on your part will do much to restore mental quietude. If this fail there remains only one course to be pursued, and that is to attempt an obliteration of the veins by an operation.

Medical Societies.

IOWA UNION MEDICAL SOCIETY.

The annual meeting of the Iowa Union Medical Society was held in the Superior Court room, Cedar Rapids, Iowa, June 14th. The President, Dr. W. M. Skinner, of Anamosa, in the chair. Dr. Edward Burd, of Lisbon, Secretary. Twenty-eight members present.

Dr. Watson, of Springville, brought before the Society a little boy, three years old, with antero-posterior curvature of upper portion of spine, which showed itself when the child was but two weeks old. Forceps were used at its birth. After a discussion of the probable cause of the curvature, in which several members took part, the treatment which seemed to be best indicated was the application of Dr. Sayre's jury-mast.

Dr. G. P. Carpenter, of Cedar Rapids, brought before the Society a very pale and thin child, a boy, nine years of age, with Pott's disease. When three years of age, he was injured by his mother falling on him in getting out of a carriage. He immediately began to suffer from pain in the lumbar region. Two years afterwards posterior curvature was discovered in this region. In June, 1880, an abscess formed at the convexity of the curvature, and the pus dissected its way downward to the right hip-joint, pointed there and was opened. Since which time several pieces of spongy bone have been discharged. Repeated probing about the hip-joint has failed to reach any necrosed bone in that region. Several sinuses connected with the carious vertebræ have opened near the hip-joint and over the illium. Another abscess is now forming at the left side of the carious vertebræ. The child has worn a brace, and the treatment has been tonic and supporting. The prognosis was unfavorable.

Dr. H. Ristine, of Cedar Rapids, approved Dr. Carpenter's treatment, and suggested the addition of cod liver oil.

Dr. J. C. Baldoz, of Mechanicsville, recommended sulphide of calcium as of much value in cases of caries of bone, and thought it might prove beneficial here.

Dr. M. Meredith, of Vinton, reported the death, in May, 1881, of Dr. E. L. Langstroth, of Vinton.

Dr. C. C. Griffin, of that city, was appointed a committee on necrology.

The President-elect, Dr. J. M. Armstrong, was then conducted to the chair, and the retiring president delivered an excellent address, which, on motion, was ordered printed.

On motion of Dr. A. B. Reid, of Cedar Rapids, it was resolved that the sessions of the Society hereafter be opened with prayer by some member of the clergy selected by the president.

Dr. J. M. Armstrong, of Lisbon, read a report of several cases of diphtheria successfully treated by means of hyposulphite of soda, quinine and whisky, and insufflations of sulphur. He believes the hyposulphite capable of destroying the germs of the disease.

Dr. E. Burd reported ten cases treated in a similar manner, with equally good results. (See Medical and Surgical Reporter, Vol. xliii, p. 445).

Dr. M. Meredith, of Vinton, has used the hyposulphite of soda, and thinks it a valuable remedy in diphtheria, but prefers the following prescription:—

℞.	Potassæ chloratis.	ʒj
	Acidi hydrochlorici,	♏xv
	Fl. ext. bellad.,	♏xv
	Aquæ,	f.ʒiv. M.

Sig.—f.ʒ ss to an adult, every two hours.

Dr. H. Ristine, of Cedar Rapids, had used both these plans of treatment, and has no confidence in them or in any other specific plan.

Drs. J. C. Batdorf and J. W. Lagrange use fluid extract jaborandi in the early stage, with benefit.

Dr. G. E. Crawford, of Cedar Rapids, considered the disease both contagious and infectious, and thought that physicians could not be too careful to prevent carrying the disease to their own families.

Dr. H. Ristine reported a successful case of nerve stretching. The history of the case is as follows:—

During the summer of 1879, Mr. M. L. Elliott, of Marion, Iowa, consulted us (Drs. Ristine, Son, and Holmes), for treatment of a painful neuralgic condition of the entire left thigh and leg, from which he had been suffering during the past ten years. We found the limb atrophied and tender along its entire course, with pain and tenderness along the whole course of spine and back part of the head, and gave it as our opinion that the symptoms were due to injury of anterior crural nerve, caused by gunshot wound of middle third of that thigh, received in battle during the rebellion, and advised him to consult Drs. Hammond or Weir Mitchell as to the proper course of procedure. He chose to see the latter, who advised the operation of stretching the nerve as the only probable means of relief. His condition, in a few months after his return from Philadelphia, became so much aggravated that he was compelled to discontinue business, and in April, 1880, requested an operation for the relief of the extreme pain he was then suffering, being at that time so much prostrated as to render him unable to leave his room. The operation was made by an incision over the anterior portion of the thigh, dissecting the integuments and fascia, extending beyond the cicatrices caused by the entrance and exit of the ball, and exposing the branches of the anterior crural nerve, and resecting of three-fourths of an inch of the smaller, and lifting from their bed several of the larger branches, and drawing them up and down.

Quite severe constitutional symptoms supervened, followed by numbness of the limb, which continued for some time, after which pain ceased; general health rapidly improved; gained twenty pounds in two months after operation. During the past six months has been engaged in active business, and says his general health is as good as at any time during his life.

Dr. G. E. Crawford, of Cedar Rapids, read a report of a case of puerperal convulsions of several days' continuance, with final recovery, treated principally with tr. veratri viridis and morphia hypodermically.

Dr. E. M. Keyes, of Walker, reported several cases of gonorrhœa successfully treated with fluid extract of kava kava.

On motion, the Secretary was instructed to send the minutes to the Medical and Surgical Reporter for publication. Adjourned.

J. M. Armstrong, *President.*
Edwin Burd, *Secretary.*

Editorial Department.

Periscope.

How To Render Septic Wounds Aseptic.

The proper measures to render foul wounds aseptic are well illustrated in a recent lecture of Prof. von Nussbaum, of Munich, translated in the Edinburgh *Medical Journal.* They are so instructive that we quote them fully:—

In July last a student received a sabre-cut of the head in a duel, which ran parallel to the sagittal suture, to the left of it, and was eleven centimetres long. The bone was denuded and laid bare, so that it seemed like a fissure. One of his friends, a military surgeon, had cut away some of the hair, washed off the blood, and dressed the wound with olive oil and Brun's wadding. For five days it went on very well. The patient then wished to get up, and asked for more to eat. The surgeon, however, noticed a considerable swelling of the edges of the wound, and refused both requests. The next day, at 4 A.M., the patient had a severe rigor, and when the surgeon came he found some erysipelas, and the wound dry and smelling badly. The temperature, which had hitherto never been above 38° C., had now risen to 40.7° C., and the patient spoke in such an excited manner that one immediately suspected the onset of delirium. The patient's relatives, who had now arrived, insisted that he should be brought to my clinic. This required a few hours' time to carry out, and when the patient came under my care, at 4 P.M., he was very delirious, had a temperature of 40.9° C., a small pulse of 130 per minute, and the erysipelas had spread over the whole scalp. There was here a probability of getting that unfortunate termination which was formerly so much dreaded in all cases of severe head-injury. Evidently there had been foul smelling pus pent up in the wound, and this had led to erysipelas. The septic condition of the secretions had affected the small blood-clots which lay in the deep crevices of the wound, and there could be little doubt that secondary meningitis was imminent. I confess that, having regard to the severity of the septic symptoms, I had very little hope of being able to bring about a favorable state of affairs; however, careful disinfection is always useful and can never do any harm, so I had the patient put under chloroform, then I cut away more of the hair from round about the wound, washed the surrounding parts, which were soiled with blood and discharge, with a five per cent. solution of carbolic acid, slit up the overlapping edges of the wound with the scissors to such an extent that the whole floor of the wound was laid bare. By this means I could evacuate some foul pus and blood-clots, the retention of which had doubtless been the cause of the erysipelas and the serious symptoms. I dipped a pad of Brun's wadding in an eight per cent. solution of chloride of zinc, and disinfected with this the

whole floor of the wound, carefully washing and syringing the exposed bare bone. I then put two drainage-tubes in the wound, sewed up the other parts with catgut sutures, injected some five per cent. carbolic lotion through the drainage-tubes, washed the surface of the skin with the same, and then put on a Lister's dressing, but without "protective," so that the gauze, which was soaked in two and a-half per cent. carbolic lotion, might come into direct contact with the secretions from the wound. I ordered the patient an acid drink and some light soup. He passed a quiet night, after getting a hypodermic injection of two cg. acetate of morphia. The next morning I was as much astonished as pleased when the patient, perfectly conscious, held out his hand and quietly wished me "Good morning." The delirium was quite gone, the temperature 38° C., and the pulse 98 per minute. Everything had changed so much for the better that we hoped the meningitis had been warded off. As the dressings had shifted a little, I changed them under the steam-spray, and found then that the wound was in a satisfactory condition. The erysipelas was quite gone, and there was no retention of the discharge. The temperature soon fell still further, and in sixteen days after his admission to my clinic the happy patient left for his home, having only a strip of plaster, about the breadth of a finger, upon the cicatrix on his scalp.

As a second illustration I may relate a case which was recently under my care. A servant-girl was pushed from her chair in jest, and fell so heavily that she fractured her radius and ulna, and the ends of the bones protruded through the skin. A practitioner who lived near put adhesive plaster upon the wound and bound up the arm in splints in the ordinary way; as it bled rather freely during the night, he sprinkled some styptic powder over the plaster. On the third day the arm was so much swollen, and there were so many blue and green blebs upon it, that the practitioner was afraid to go on treating the case, and called in another medical man, as the patient was strongly opposed to going into hospital. The surgeon who was called in requested to have a consultation with me, and spoke of the possibility of amputation being necessary. The mention of amputation caused great consternation in the house, for the foolish joke had been perpetrated by the son of the girl's master.

When I saw the patient the arm was greatly swollen and tense, the wound had a grayish surface, and was covered with foul smelling pus; round about it there were also numerous blebs of different sizes. The small ones—about as large as a pin's head—were like transparent yellow glassy beads, and were very numerous, and lying close together; the larger ones were black and blue in color, and filled with blood-tinged serum. There was high fever. The patient's countenance was of a yellowish-brown color, and the morning temperature was as high as 40.3° C. Under these circumstances I could not say positively that the arm might be saved; but, on account of the patient's youth and good constitution, I said that with the utmost care a good result might probably be obtained. Both the patient and her medical attendant gave me full permission to do what I thought proper.

I first put the patient under the influence of an anæsthetic. I then shaved the whole arm, washed it with a five per cent. carbolic lotion, and let two steam sprays play upon the wound. I made a semi circular incision, which extended about half round the arm, avoiding nerves, etc., and by this means exposed the fragments of the broken bones lying at the bottom of the wound. The arm could then be bent in the middle, so that it was possible to have the floor of the wound thoroughly washed and purified with five per cent. carbolic lotion. (In cases where there is no bleeding, but only foul pus, I prefer to use the eight per cent. solution of chloride of zinc.) I next ligatured some bleeding vessels, cut off the sharp ends of the broken bones, syringed and washed everything clean, put short drainage-tubes in each corner of the wound, and bandaged the arm on a splint, leaving the widely-gaping wound uncovered; over this wound—which was about half the size of an amputation wound—I put some absorptive gauze, and arranged that a three per cent. carbolic lotion should drop upon this day and night, the drops following each other so rapidly that they formed really a fine continuous stream. In twenty-four hours about twenty-eight litres of this lotion passed over the arm. After two days, however, the wound became free from odor, and the temperature fell to 37.7° C.–38.2° C., so I diminished the irrigation considerably, and allowed from sixteen to eighteen litres of carbolic lotion to flow over the wound in the twenty four hours. In a few days the wound looked so well that an ordinary Lister's dressing was applied, and the wound soon healed up like a fresh injury.

On Disease of the Prostate.

At a recent meeting of the Harveian Society of London, Mr. Teevan read a paper on interference with micturition, the result of prostatic disease. It might be caused by, 1, acute inflammation; 2, chronic inflammation; 3, various alterations in bulk of the lobes of the organ; 4, stone descending into, or originating in the prostate; 5, malignant disease. All the above might, in some way or other, modify the act of micturition. Acute inflammation might be caused by the extension of gonorrhœal trouble, powerful injections, or tubercular and pyæmic deposits. If the patient could not micturate, an india-rubber catheter ought to be at once introduced, at it was the instrument which caused the least irritation, but it was not always possible to pass it in such cases, and if it failed a soft olivary catheter was indicated. By clearing out the rectum, filling it with ice, and placing half a dozen leeches on the perineum, the inflammation could usually be reduced, and the further employment of the catheter rendered unnecessary. If abscess formed it generally burst into the urethra, but if fluctuation could be detected in the rectum or perineum the knife ought to be at once applied. Chronic inflammation might follow gonorrhœa, or be caused by rectal trouble. The dull aching pain in the perineum and anus,

associated with increased frequency of urination, was very wearying to a patient. The application of a few drops of a solution of sulphate of copper, (five to ten grains to the ounce) to the prostatic urethra twice a week, would usually relieve the symptoms. If it failed, repeated blisterings of the perineum would generally effect a cure. Alterations in size of the different lobes of the prostate. It was of the utmost importance to detect prostratic obstruction early, for if it were not attended to, the bladder would become hypertrophied and fasciculated, and the patient condemned to a life of misery. The earliest symptoms of commencing trouble were nocturnal frequency of micturition and the tendency of the urine to fall vertically between the patient's legs instead of being ejected in the arc of a circle. The sufferer might be taught to relieve his bladder night and morning, with a soft olivary catheter. It could not be too strongly borne in mind that dribbling of urine in middle-aged and old men meant retention, not incontinence. If the practitioner were armed with a bougie catheter it was not necessary, in cases of retention from prostatic obstruction, to diagnose which particular lobe of the organ was enlarged, for the bougie would mount the hypertrophied median lobe, or would pass around the projecting lateral lobe. The catheter could then be screwed on to the bougie and made to follow the latter into the bladder, and so relieve the patient. A stone descending from the bladder might be arrested in the prostate, or have originated there. It was very important to make an accurate diagnosis, for cases have come under his notice which had been treated for retention from stricture where the obstruction was a stone in the prostate. If a metal instrument were not used the mistake might easily occur, for the sensation transmitted by the passage of a soft catheter through a urethra narrowed by a calculus in it, was almost similar to that conveyed by the instrument when introduced through a tight stricture. When a man who, up to the time of the stoppage, had always been able to pass a full stream of urine, was seized with retention, without any premonitory symptoms, the impaction of a stone in the prostatic urethra ought to be suspected. When a calculus was arrested in the deeper portion of the urethra it ought to be pushed back into the bladder with a wax bougie, and then crushed. Malignant disease of the prostate was, fortunately, very rare. It might not be attended by any pain, and could usually be detected by rectal examination, disclosing the existence of a hard nodule on one side of the prostate, and not on the other. This want of symmetry was a most valuable diagnostic sign. The few cases which had come under his notice were all of the scirrhous kind.

Treatment of High Arterial Tension.

At a recent meeting of the Glasgow Southern Medical Society, Professor McCall Anderson read a paper on Deviations from the Normal Arterial Tension associated with Certain Diseases of the Kidneys and Heart, and their Treatment. In estimating the state of tension of the pulse, which is full, strong, resisting and prolonged when the tension is high, and weak, compressible, and often dicrotic when it is low, he pointed out that we must not be guided by the volume of the pulse, which may be large or small in either case.

He remarked also that, in his opinion, the chief value of the sphygmograph at the bedside was to enable us to gauge the degree of tension, and to register from time to time its variations more accurately than can be done by the finger.

High tension is to be relieved by removing the cause. Thus, in acute Bright's disease, it is principally due to diminished excretion of water; and, accordingly, if we succeed in inducing profuse urination, the high tension, as well as the other symptoms, disappear. This was illustrated by the case of a little boy, æt. 14, whose only treatment consisted in the administration of oceans of skimmed milk, which, in two days, raised the amount of urine passed from 40 up to 224 ounces, and within a week the high tension and all the other symptoms had disappeared.

In chronic Bright's disease, on the other hand, there is often excessive urination, and yet the tension is high, the cause being the stop-cock action of the arterioles throughout the system on the one hand, and the over-action of the frequently hypertrophied left ventricle on the other. In too many cases, unfortunately, we are unable to remove the chronic disease of the kidney, but yet we can often diminish the tension, and thus may avert threatened complications—cerebral hemorrhage, for example. This is to be done—

1st. By stimulating the organs of excretion.

2d. By the administration of medicines which directly lower the tension.

The latter are of use, not only with the view of controlling kidney, but also heart complications, such as angina pectoris. The medicines are: 1st, *nitrite of amyl*, which is usually given by inhalation, three or four drops being put upon a handkerchief, and which, as is now well known, lowers the tension and controls angina pectoris. Illustrations were also given of its influence in arresting threatened attacks of ague and hysterical epilepsy.

2d. *Nitro-glycerine*, which acts more slowly than the former, five or six minutes elapsing before its physiological action is at its height, but which is probably more permanently beneficial. The influence of this drug was well illustrated by the case of a gentleman who had angina pectoris as a complication of fatty heart, and who received permanent benefit from it. The preparation used was a 1 per cent. solution in spirit; the dose being from one, cautiously increased up to fifteen drops every three hours; but latterly the angina could be controlled by a dose of two or three drops when a paroxysm threatened.

On the other hand, *when the tension is unduly low*, this may sometimes be rectified. 1st, by support and stimulation; and 2d, by the administration of medicines which directly raise the tension. These are *digitalis*, whose influence in this respect is so well known as not to require further mention, and *casca*.

A very striking illustration of the influence of this drug was given: That of a patient with dilatation of the heart, following upon aortic valve disease, and which had led to passive congestion of the lungs, liver and kidneys, with very

scanty urination, albuminuria, and extreme dropsy. The preparation used was the tincture of the strength of 1 to 10, and the dose was from 5 to 10 minims three times a day. Within a week all the symptoms resulting from failure of the heart's action had disappeared.

In concluding, Dr. Anderson pointed out that we had in nitro-glycerine a valuable rival to nitrite of amyl, and the tincture of casca stood in the same relation to tincture of digitalis.

Treatment of Czæna.

M. Terullon writes on this subject, in the *Bull. Gen. de Thérapeutique*, April:—

True ozæna, he says, includes those cases in which there is no osteal or periosteal lesion; in it the mucous membrane, when denuded of adherent crusts, is found to be almost intact, only slightly reddened, scarcely inflamed, thinned, and less vascular or velvety than usual. This thinning of the membrane is characteristic, and can be detected by the probe, which seems to come almost into direct contact with the bone. The nose is often blocked by greenish, fetid crusts, which the patient has great difficulty in expelling by blowing. These crusts may reach down to the pharynx and press on the soft palate. The patient sleeps with the mouth open, suffers constantly from headache, nausea, distate for food, and prolonged malaise. The manner in which this condition is developed is revealed on making a rhinoscopic examination. The nasal cavities are invariably found to be enormously dilated, forming a veritable antrum with no central constriction; the septum is visible along its whole extent, and sometimes also a portion of the posterior pharyngeal wall and the pharyngeal orifice of the Eustachian tube—a state of matters very different from that which characterizes the normal condition. The lower turbinated bone is usually also rudimentry. These features suggested to Zaufal the theory which is now very generally accepted regarding ozæna. According to him, inspiration takes little part in the removal of mucus from the nose; expiration, on the contrary, sweeps it horizontally forward to a more sensitive portion of the mucous membrane, where its presence excites the desire to clear the nose of obstruction. The inferior turbinated bone, besides narrowing the passage, accelerates and directs the current of air; when these bones are small and rudimentary, and the nasal cavities abnormally wide, the current of air has not sufficient force to carry the mucous secretion forward, so that the discharge accumulates, dries into crusts, and decomposes—whence the odor described. So long as the accumulation is present the odor persists; when that is cleared away the odor disappears for a time. Zaufal's views are confirmed by what happens after the removal of large nasal polypi, when it is not unusual to have slight ozæna for a time, till the nares resume their normal volume.

The method of treatment which M. Terrillon advocates, and describes as very successful, is based on the foregoing theory of origin of the affection. It consists first of thorough irrigation of the nasal cavities, with a weak solution of common salt, once every two or three days, or as often as twice a day, if necessary; and secondly, the insertion of a plug of cotton wool into each nostril, in such a way as to give the nares somewhat their normal conformation internally, and thus to remove the cause of the decomposition of the mucus. The cotton should be wrapped round the end of a knitting needle, so as to form a plug the length of the nasal fossa, *i. e.*, about 5–6 centimetres long; it should not be thicker than a penholder. The plug is then passed into the nose, being directed along its outer wall, pointing towards the outer angle of the eye, and thus taking the place of the inferior turbinated bone. When the plug is in place the needle is easily withdrawn. The plug should be renewed every two or three days, and is easily expelled by irrigation. The patient soon learns to apply it himself. Soon after, the mucus which comes from the nose will be found to be liquid, not fetid, and in its usual normal condition. This method of treatment, so long as it is faithfully carried out, keeps the affection effectually in check; but if it be neglected, even for a short time, the ozæna returns. As a rule, patients will not object to the trouble which it involves, as the maneuver is simple and easy, and the infirmity from which it relieves them is a very disagreeable one, both to themselves and their neighbors.

Treatment of Incontinence of Urine in Women.

Dr. J. Milne Chapman, M.B., M.R.C.S., Assistant to the Physician for Diseases of Women, Royal Infirmary, Edinburgh, read before the Edinburgh Obstetrical Society a paper, given in the Edinburgh *Medical Journal*, containing the following case: —

Mrs. C., age fifty-eight, complained of frequent and painful micturition, which had lasted three and a half years. When she first took ill a doctor told her she had inflammation of the bladder and some urethral affection (caruncle?), for both of which he treated her. On September 30th, 1880, it was found that she could only retain water half an hour. The pudenda were reddened, as was also the whole vagina. The urethra was somewhat gaping at its outlet. There was considerable pain evinced on rubbing the two walls of the bladder over one another, or on introducing the sound into the viscus. The urine was turbid, acid, and contained pus cells, bladder epithelium, and some oxalates. The urethra was dilated by the finger, with the result of increasing the bladder's retaining limit to one and a half hour. At the same time nux vomica and uva ursi were given, and the vaginitis treated by sedative applications. The good effects of the dilatation disappeared in about three weeks, and it was then repeated, but soon she again relapsed into her former condition, minus, however, the pain and the presence of pus in the urine. The urethra was examined by the endoscope, and a slight redness was noticed. Iodoform bougies were used. The condition of the bladder wall, as seen by the endoscope, was normal, and now (November 8th) her only trouble was that every hour, day and night, she had to empty her bladder. The total quantity of urine passed was fifty ounces, which gave little more than two ounces as the amount at each micturition. The sound

passed into the bladder three inches from the external meatus, and it was found that it could only be pushed half an inch further, and that thus pain was caused. It occurred to me that gradual forcible dilatation of the bladder might relieve the patient, and, with Dr. Angus Macdonald's permission, I proceeded to submit this idea to trial. The bladder was distended with warm two-per-cent. carbolic solution, and the quantity used measured, and found to be four ounces. Any attempt to inject more caused the most intense pain, and the resistance offered was great, as could be felt by the difficulty experienced in compressing the ball of the syringe. From this date the bladder was filled to distention daily, the injection being stopped when the patient's pain became great, and when resistance reached a high point. The apparatus used was a Higginson's syringe attached to an ordinary catheter, care being taken to prevent the access of air to the bladder. Each day there was a gradual increase in the amount injected, of from a drachm to an ounce. On two or three occasions the fluid as it returned was tinged with blood, but no harm ensued. On December 20th she was discharged in the following condition: Instead of micturating every hour, she had only to get up once or twice during the night, and by day she could retain water so well as not to be inconvenienced. Sixteen ounces could now be injected into the bladder, and less pain was thereby caused than formerly, when four ounces was the limit. The urine was normal in all respects. Two months later she reported herself as being still as well as when she left hospital.

It will be seen from this case that the woman had a cystitis, with frequency of micturition, which latter remained after the former was cured; that any indication there was for further treatment was attended to either medicinally, topically, or by operation, but that still the frequent micturition continued; that the bladder was then found smaller than normal, both by measurement with the sound, and by the much more certain method of measuring its capacity, and that this capacity was increased fourfold by what may be called *slow operative dilatation of the bladder*, and that the results were in all respects satisfactory.

Reviews and Book Notices.

BOOK NOTICES.

Proceedings of the Nebraska State Medical Society, ninth, tenth, eleventh, and twelfth Annual Sessions. Omaha, Neb., Printing and Publishing House, 1880, pp. 297.

The Nebraska Society shows signs of rapid progress, as evinced by the fact that while the proceedings of the ninth annual session cover barely fifteen pages, the twelfth takes up more than two-thirds of the entire volume. In the address of the retiring President, Dr. E. M. Whitten, delivered at the eleventh annual meeting, we find many excellent suggestions dressed up in the garb of wit and humor. He deplores the professional mania which "has spoiled many a good mechanic, done injustice to the hod and anvil, cheated the goose and spade out of their rights, and committed downright fraud and swindle on the corn and potato fields." He pitches into the religious papers for aiding in the practice of quackery and fraud, and exposes various systems of charlatanery; nor does he neglect to minister to the æsthetic wants of the members present, for we find on page 80 an illustration copied from a painting, representing Pierius' cure for the sting of an asp, which was exhibited. This cure consisted in taking a brisk ride on an ass, with the face to the tail, holding on to that appendage with both hands, when it is said that the pain will be transmitted from the patient to the ass; and certainly, in the illustration, the latter shows signs of having received a sting somewhere, while the rider looks as if he had other things to think about besides such trifles as the sting of an asp. The papers read at the twelfth session were both numerous and important, and embraced a great variety of subjects, and some of the members showed a considerable amount of enthusiasm and activity by presenting from two to five papers each.

A Medical Formulary, Based on the United States and British Pharmacopœias, together with numerous French, German and Unofficinal Preparations. By Laurence Johnson, A. M., M.D., Lecturer on Medical Botany, Medical Department of the University of the City of New York, etc., etc. New York: William Wood & Co., 27 Great Jones St., 1881. Cloth, 8vo. pp. 402.

This constitutes the volume for May, of Wood's Library of Standard Medical Authors. Practitioners will find it a convenient book of reference with regard to drugs and pharmaceutical preparations, the plants and minerals ordinarily used in medicine being alphabetically arranged according to their Latin names and the various officinal and unofficinal formulæ, with doses given below. Although the work will thus be found, to a certain extent, useful, the rapid multiplication of books of this kind is to be deplored, and it is to be hoped that physicians with literary talents will, in the future, devote their time and their energies more to original work, and not waste them on the constant reproduction of endless formulæ, the effect of which is to confuse rather than to simplify and render easy the practice of medicine.

THE

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THE DIMINISHED VALUE OF VACCINATION.

It is an ugly fact that after fourscore years and more of vaccination smallpox is not yet stamped out. Further than that, its periodical visitations are not any rarer nor less destructive than they were half a century ago; some say they are more so. Last winter, in this city, the deaths from this disease averaged about fifty weekly, for month after month; in London, where vaccination is compulsory, the cases in the first week of June were more than 1500; it has only been a few years since Paris was visited by a widely fatal epidemic.

Such facts, and we refer to but a very few of them, have given medical men serious thought. That vaccination properly performed, with active virus and with sufficient frequency, is a sufficient preventive, need not be questioned. The error must lie in its inefficient performance.

This may arise through several causes. Persons may not be vaccinated at all; the virus may have degenerated; revaccination may be absolutely required; the virus may be active but insufficient in quantity to impress the system.

A valuable contribution to this subject was made in the *Fortnightly Review*, by Dr. CAMERON, of Glasgow. He argues that vaccine matter in common use in England and Scotland must have greatly degenerated, or else, for some other reason, vaccination cannot have been well performed. He shows that *ten times* as many persons take smallpox after vaccination now, than in 1830; and that of vaccinated children under ten years, five times as many died in the period 1870–79, than in the period 1824–51. Some of the conclusions he considers established beyond doubt are:—

1. That the protection against smallpox afforded by the vaccine lymph in use in this country, though still great, has become much less than it was when the lymph had undergone comparatively but a few transmissions through the human subject.

2. That the number of cases of smallpox occurring now per million of vaccinated persons is very much greater than that shown in the records of vaccinated populations in the earlier part of the century.

3. That the death-rate in recorded cases of post-vaccinal smallpox has progressively increased in all cases, with and without marks, from 1.75 per cent. in 1819–35 to over 10 per cent. in 1870–9, and in cases with marks from 6.9 per cent. in 1836–51 to 9.2 per cent. in 1870–9.

4. That this increase in mortality has been most remarkable in the best vaccinated classes of cases, the death-rate in cases with three or more cicatrices in 1870–9 being twice what it was in 1852–67; and the death-rate in cases with three or more good cicatrices in 1876–9 being thrice what it was in 1852–67.

5. That the proportion in which vaccinated children are attacked and cut off by smallpox has alarmingly increased, being many times greater during the last decade than it was thirty or forty years earlier.

Some of the London surgeons claim that much of this mortality is owing to the inertness of the virus used, and the neglect of revaccination. A letter from one of these, in the *British Medical Journal*, seems to show the highly unprotected state of the adult population against smallpox, owing to the neglect of revaccination. In eighty-one cases in which persons had not been revaccinated since the first vaccination in infancy, 90 per cent. of the revaccination with calf-lymph proved successful; showing that in 90 per cent. of those persons the protection afforded during

early life had worn out, and the necessary protection to be obtained by revaccination after the age of fifteen had been neglected, until the present alarm, owing to the epidemic prevalence of smallpox, had reminded them of the extreme danger of such neglect. As a matter of fact, it is probably essential, as a protection of the population from smallpox, that each individual should be successfully revaccinated after the age of fifteen, although such a large percentage of "takes" seems to prove that the virus first used was largely inert.

In the opinion of many, both in this country and Europe, both vaccination and revaccination should be made compulsory. A long discussion of the question recently took place at the Academy of Medicine at Paris. A committee appointed to consider the subject submitted two resolutions. The first was that "the Academy believes that it is urgent, and of great public importance, that vaccination should be rendered obligatory," which was carried by the votes of forty-six of the sixty-seven members present, nineteen voting against it and two remaining neutral. A large majority also carried the second resolution: "Revaccination should be encouraged in every possible manner, and even insisted upon by rules laid down by the different administrations, whenever this is possible, and especially by municipal bodies when the medical and sanitary officers have indicated the necessity of such obligation."

Baron LARREY, M. JULES GUERIN, and others, opposed compulsion, as "hostile to the prerogatives of the medical profession and to civic liberty."

It is possible that vaccination as a preventive measure is wearing out, and with every precaution will afford in the future less security than in the past; but it is more likely that the long humanized vaccine virus has exhausted its prophylactic virtues, and that we must have recourse to bovine virus for both vaccination and revaccination. This is rapidly becoming recognized in this country and England, as it has long been in Belgium and elsewhere.

NOTES ON ANTHROPOLOGICAL STUDIES.

In reviewing the later achievements of anthropological study, the reader will not fail to be impressed with the reaction it manifests against the tyranny of scientific dogmatism. The more clearly the comparative anatomy of man and the anthropoid apes has been studied, the more closely does it appear that the differences between them are great and fundamental. The popular notions of evolution and so-called "Darwinism," by which the "development of man from the monkey" are so glibly explained, meet with the strongest refutation in the articles of VON BISCHOFF on the anatomy of the gorilla, and of ECKER and VIRCHOW on the inner structure of the skulls and brains of anthropoid apes, etc.

So, too, the singular instances of men with a caudal appendage, hastily supposed to be a reversion to a remote ancestral type of tailed men, have proved, on proper examination, to be nothing more than a local growth, strictly pathological in character, and thus in no way to be regarded as a sign of "atavism."

These opinions are repeatedly emphasized in the *Verhandlungen* of the last meeting of the German Society of Anthropology and Ethnology, which have recently reached us. It is quite evident that the members foresee that the tyranny of a scientific dogma may be just as obtrusive as that of a theological one; and having gained freedom from the latter they are not going to accept the former. Such, indeed, is the only safe rule of inductive research.

The question of the size and height of men receives a careful study in these *Verhandlungen*, from Herr RANKE and others. It has been supposed by some that the earlier races were larger in size, by others that they were smaller than the people now occupying the same territory. RANKE demonstrates, from a large number of measurements, that man in this respect is a creature of the soil on which he lives; that certain localities produce on an average men of greater stature than other localities; and that as a general rule elevation above the sea level and mountainous regions are peopled by the larger races. The

quality and quantity of food have an effect, as well as the prevailing complexion, blonde races being somewhat larger than brunettes. No diminution in stature nor any increase can be proved to have taken place since even pre-historic times in Europe. The skeletons from the oldest tumuli occasionally show individuals to have reached the extraordinary height of two metres (6 ft. 6 in.), but as a rule are not in excess of the stature of the population now dwelling on the same soil.

Another paper in the same direction was by Herr Kollman, on the facial angle. He divided this craniological characteristic into prognathism, where the angle is 76°–83°; mesognathism, 83°–90°, and orthognathism, 90°–97°. From numerous measurements of various ethnic groups he finds that prognathism appears both in cultivated and savage people, and in modern and pre historic times. As a race characteristic it only has ethnological value when the proportion of the total of prognathism in a race is compared with the total of mesognathism and orthognathism. Thus in the dolicocephalic races of dark skin, prognathism is common, while among the dolicocephali of light skin it is rare.

Herr Kollman indulges in some game-making at craniology as it is now understood, and says that as in a collection of local skulls made at Göttingen fine types of negro and Indian crania may be picked out, so if some dark-skinned anatomist on Lake Tanganiko were to collect the crania of fellow citizens of Central Africa, he would find among them first-class types of Anglo-Saxon, Bohemian and Frankish skulls, all derived from the natives of some village of Waganda.

Notes and Comments.

Therapeutic Notes.

SPERGULARIA MEDIA IN GONORRHŒAL CYSTITIS.

In *La Cronica Medica* Dr. Gimeno describes a very severe and obstinate case of blenorrhagic cysto-nephritis, of six months' standing, rapidly relieved by pills of the extract of *Spergularia media*. Without other medication the patient entirely recovered.

BORACIC ACID IN VESICAL CATARRH.

Prof. Rosenthal, of Vienna (*Wiener Med. Blätter*), has derived decided benefit from boracic acid in various forms of catarrh of the bladder.

℞.	Boracic acid, pure,	1 part
	Warm water,	20 parts
	Hot glycerine,	5 parts. M.

This mixture will keep well for months, and may be given in teaspoonful doses once or oftener daily, in a glass of water.

CAUTERIZATION OF THE EAR FOR SCIATICA.

The curious fact that cauterization of the helix of the ear is a promptly curative procedure in many cases of sciatica of peripheral origin is again illustrated by a number of cases collected in *Schmidt's Jahrbucher*, No. 2, 1881. The cauterization of the helix of the ear of the same side as the painful limb was accomplished with Vienna paste.

LIME WATER IN GONORRHŒA.

As an abortant of the inflammatory stage of acute gonorrhœa Dr. Küchenmeister recommends:—

℞.	Lime water,	1 part
	Distilled water,	4 parts,

For an injection, to be used every hour or two.

From his account (in the *Deutsche Med. Wochenschrift*) it does not appear that the course of the disease was shortened, but only the inflammatory symptoms lessened.

Propositions About Venesection.

The propriety of venesection as a therapeutic measure is securing renewed attention in England, as well as in this country. Among recent articles, we note one by Mr. T. M. Dolan, F.R.C.S., in the *Medical Press and Circular*, May 18th. He sums up his conclusions in the following propositions:—

1. Venesection has no direct influence over inflammation, external or internal.

2. Venesection is useless, in the case of all external inflammations.

3. Venesection is of use in these inflammations, where the cardiac and respiratory functions are interfered with.

4. Local bleeding in external inflammations is most useful, its effect is patent.

5. Local bleeding in internal inflammations, where there is a direct capillary circulation between the skin and inflamed part, is of manifest service.

6. The benefit of local bleeding, when there are not such conditions, is neither clear nor positively ascertained.

These propositions express fairly well the true

position of venesection in therapeutics, although, of course, they are all subject to exceptions in particular cases.

Mr. Dolan quotes, with approval, the following words of Dr. Markham, on the subject of general bleeding:—

"Is it credible that a remedy which, through evil report and through good report, has steadily held its own in the catalogue of curative agencies, from the days of Hippocrates to our own, can all at once have ceased to be of service to humanity? Must we believe that all the great minds who, through the long ages of past medicine, have resorted to this remedy, have been using it under a delusion? Surely, the very fact of the antiquity of the remedy, its universality, and its persistence during all times as a curative measure, is strong *à priori* evidence of its possessing value and excellence as such."

Loss of the Sense of Smell, through Over Stimulation.

The sense of smell is very easily lessened and may be wholly lost, through excessive stimulation. In a recent lecture, Dr. Julius Althaus gives some curious examples:—

It is related of Marshal Richelieu, that he habitually lived in an atmosphere of the strongest scents, which made his visitors quite ill, while he was himself ultimately quite unaware of them. Scavengers, dustmen, and tallow boilers become after a time insensible to the disgusting odors surrounding them, anatomists to the smell of the dissecting-room, and patients suffering from cancer to the emanations from their sores. But even true anosmia, or insensibility to *any* odorous substances, may thus be produced. Graves has recorded the case of a captain, who, in the Irish rebellion of 1798, had to superintend the work of emptying out an old cesspool which was filled with the offscourings of the market and all manner of filth, and on the bottom of which five hundred pikes were reported to have been concealed, and were actually discovered. He was all this time exposed to most abominable effluvia, and suffered greatly from the stench. Next day he found that he had entirely lost his smell, and thirty-six years afterward, when Graves examined him, the anosmia still persisted. A similar thing happened to a surgeon at Bremen, in Germany, who had to make the post-mortem examination of an archbishop who had died of cancer of the stomach. The fearful emanations arising from the body of this dignitary of the church destroyed the surgeon's smell for life.

Trade Rights in Pharmaceuticals.

The common law of England, prior to 1875, gave manufacturers a "trade right" to any fancy name, private mark, or peculiar device they adopted. From January 1st, 1876, an Act of Parliament decreed that all trade-marks should be registered. A similar law prevails in this country, and applies to medicines and all sorts of pharmaceutical and hygienic preparations. That the system has great commercial value is granted on all hands. Whether it is equally desirable in medical and pharmaceutical ethics is another question. Mr. Edmund Johnson, F.S.S., of London, says, in a recent article (*Chemist and Druggist*, May 14):—

"The manufacturer, by the registration of a trade-mark, can secure to himself, his successor and assigns, the absolute and exclusive right to use that mark in connection with his goods, and to identify any particular class of them sold with that mark as being of an unvarying and standard degree of excellence. The public, on the other hand, learn to look upon the manufacturer's trade-mark as a guarantee of such standard degree, from which they know he cannot depart, except under penalty of losing both credit and custom. Thus, the trade-mark affords security to the purchaser, and makes honesty the best policy on the part of the manufacturer."

If this reasoning is correct, it is not obvious why it should not apply to a pharmaceutical chemist as well as to other manufacturers. As the matter was discussed at the last meeting of the American Medical Association, it becomes one of the "questions of the day," and we should be glad to publish expressions of opinion upon it.

Naphtha Oil in Affections of the Skin.

Prof. Kaposi read a paper at the Vienna Medical Society (*Wien. Med. Zeit.*, May 10th), in which he stated that he had employed this substance (the B naphtha oil, largely used by color-makers) as an advantageous substitute for tar, being as useful, while not producing the same disagreeable effects as regards color, smell, or spoiling linen. Hitherto he has used it only externally, but from its rapid absorption and excretion it may be used, probably with good effect, internally. How far this is the case, and to what diseases it is especially applicable, further trial must prove. At present, speaking from seventy-six cases, Kaposi has found it a useful remedy. Thus, in scabies, a ten per cent. simple ointment followed by a compound ointment of ten parts of naphtha oil, fifty of green soap, and one hundred of lard, will effect a cure in two applications. In eczema, as with tar, the

exact time of application is difficult to choose, but if this be well chosen, the itching is allayed and a slow desquamation occurs. In psoriasis a ten per cent. ointment produces the same effect as a chrysorabin ointment, without the discoloration caused by this. The ointment has also been used with good effect in ichthyosis, seborrhœa, and pityriasis versicolor; but it is of no avail in lupus vulgaris; while a case of lupus erythematosus was advantageously treated. The naphtha oil is easily soluble in alcohol and in oils or fats, but water requires equal parts of alcohol to be added to effect a solution.

Treatment of Chronic Ulcers of the Legs.

The elastic bandage has been well received as a means of treating old ulcers of the legs. But Dr. Dawosky, of Celle, who has charge of a large hospital there, says it has disappointed him (*Memorabilien*, No. 3, 1881). He had recourse to another plan with astonishingly fine results. He takes his patient, has him well bathed and puts him to bed, just as if he had a fracture of the leg, absolutely forbidding him to rise. A hot, aromatic fomentation of an infusion of chamomile, lavender, rosemary or calamus, with an equal part of a five per cent. solution of carbolic acid, is constantly maintained by dropping on flannels or lint covering the ulcer. The heat of the fluid is increased as the patient becomes accustomed to it. The effect is "magical." In twenty-four hours a decided change is visible. The process of regeneration begins at once, the foul odor disappears, and healthy granulations soon spring up. When this point is reached, the carbolic acid may be omitted, and merely the aromatic infusion continued.

No internal medicine whatever is needed, merely good and abundant nourishment. When the patients leave, he recommends them to continue to bathe the part with the following lotion:—

℞.	Olei caryophylli,	gtt. xxx
	Liq. ammon. aromat.,	℥j
	Spt. juniperi,	℥iv. M.

The Value of Quinia in Connection with Sedatives

Dr. Laudon Carter Grey, according to *Allgemeine Medicinische Central-Zeitung*, May 7th, 1881, regards the administration of bromides alone, in the treatment of epilepsy, especially if the patient be in an asthenic condition, as not only of doubtful value, but even as dangerous. In those cases he either combines them with quinia, or gives the latter after having obtained the characteristic effects of the bromides. His usual plan is to give the bromides of potassium and sodium combined, in doses of about ten grains of the former to five of the latter, until the symptoms of bromism are produced, and then follow up the treatment with from two to three grains of quinia twice or three times daily. When large doses of the bromides are needed he always combines them with quinia from the first, and he finds that the symptoms of bromism are thus retarded. In the treatment of other diseases, as neuralgia, headache, and insomnia, the therapeutic effects of the bromides seemed likewise to be increased by the addition of quinia, and the same is, according to the observations of the author, true with regard to the use of other sedatives, as hyoscyamus and belladonna.

Albuminuria in Typhoid Fever.

M. Bouchard, at a recent meeting of the Soc. de Biologie, stated that in certain cases the coagulum of albumen, under the influence of heat, becomes retracted, and that in such cases there is generally renal alteration. Albuminous urine in which the coagulum does not become retracted is generally observed in diseases which have high fever as a marked symptom, such as typhoid fever, erysipelas, pneumonia, acute rheumatism.

In typhoid fever the urine always contains albumen, and this albumen is often capable of retraction; there is in such case a veritable renal lesion analogous to that produced accidentally. In all such cases bacteriæ are found in the urine, and sometimes also in the bullæ of ecthyma developed on the skin, or in abscesses developed during the course of the fever. M. Cornil, after anatomical observation of the kidneys in typhoid fever and the infectious diseases, concluded that the kidney is affected in these diseases, the cells are altered, there is a peculiar exudat in the tubuli. In typhoid fever bacteriæ are found everywhere.

The Value of Belladonna in Intestinal Occlusion.

Dr. C. J. Edlefsen relates, in *Norsk Magazin for Lægevidenskaben*, the case of a ship carpenter, forty-eight years of age, who had always enjoyed previous good health, but during seven days had had no evacuation of the bowels, and during the past two days had vomited fecal matter. The abdomen was distended, and very tender to the touch, the extremities cold, pulse frequent, but feeble: no excrements in the rectum. Various laxatives and injections had been tried in vain. Patient was now ordered $\frac{1}{5}$ grain

of extract of belladonna every hour. After five doses (three grains) had been taken, the vomiting ceased, and after five more doses, the patient was relieved of about one gallon of thin, gruel-like excrements, after which he improved rapidly. There were no symptoms of belladonna poisoning, although six grains of the extract were given.

Contagious Carbuncle.

M. Draston published recently, in the *Gazette Médicale*, an interesting observation:—

A patient, long a sufferer from chronic rheumatism, became exceedingly infirm, and finally an anthrax (carbuncle) developed in the gluteal region; she was a member of a religious order, and five sisters attended to the dressings. Two washed the ulcerations, and also the linen used in the dressings; they both suffered from very painful boils (furuncles) on the fingers and hands; two others had them on the forearm and face. The fifth did not suffer, because she had taken the precaution to place the bandages in water and allow them to soak, even then using a piece of wood in washing them. Several years previously, during the war, she had the care of a soldier with carbuncle, and had had sores on all the fingers; this experience led her to make use of these measures of precaution.

Mercurial Solution for Hypodermic Injections.

M. Yvon considers that a mercurial solution for injection should not exercise any local action, and should be absorbed as rapidly as possible. The last condition to be fulfilled is that the solution should not coagulate albumen. The following prescription gives a liquid which fulfills these conditions:—

℞. Hydrarg. biniodid,	1 gram	(gr. xv)
Potass. iodid,	1 gram	(gr. xv)
Sodæ phosphat. (tribasic),	2 grams	(ʒ ss)
Aquæ dest.	to 50 cc.	(ad ʒ j–ʒ v).

This solution has a slight alkaline reaction, does not coagulate albumen, and if it is mixed in equal quantity with a concentrated solution of albumen it prevents its coagulation by heat.

A Ready Method for Hot Fomentations.

A patient lately informed me, says Dr. Richard Neale, in the *British Medical Journal*, of a method adopted in her family for many years, to prepare flannels for hot fomentation. The flannels are merely placed in the steamer of an ordinary steam kettle; they quickly become thoroughly permeated by the steam, when the kettle is placed on the fire, and can be readily changed without any fear of scalded fingers during the attempt to wring them sufficiently dry, as in the ordinary method. She has also presented several steam kettles, especially made for the purpose, to one of the London hospitals.

Excision of the Mamma for Eczema.

In cases of long standing, obstinate eczema of the breast, Mr. George Lawson, of London, recommends excision of the breast, as so many of these cases develop diffused cancer. He has performed this operation as a prophylactic measure. Other London surgeons hesitate to advocate this procedure, although, in a recent debate, Mr. Lister acknowledged that he had himself known cancerous growths to follow intractable eczema.

Salicylate of Sodium as a Remedy in Nervous Headache.

Dr. Œhlschläger, of Danzig, says, in *Allgemeine Medicinische Central Zeitung*, May 7th, 1881, that he has found this remedy of great value in the treatment of nervous headache, especially if given in a dose of one gram (gr. xv) in the beginning of an attack. It usually produces drowsiness, and after a few hours the patient wakes up refreshed and free from pain. It, however, often fails to produce this effect in cases dependent on anæmia.

Abortive Treatment of Facial Erysipelas.

Drs. Nörregaard and Christie state, in *Norsk Magazin for Lægevidenskaben* that they have succeeded in preventing facial erysipelas from spreading by painting around the affected part a solid ring of collodion. It must be put on thick, when it will be found that the disease will spread to the ring, and there seemingly fight against this opposing barrier, the swollen parts hanging over the ring like a distended bag, but unable to pass it.

On Arsenic Poisoning from Wall Paper.

Drs. S. Jolin and E. Welander, of Sweden, both report, in *Hygiea*, cases of poisoning from wall paper, in which arsenic was found in the urine of the patients.

—At St. Mary's Hospital, Philadelphia, during the six months ending June 30th, 1881, there were treated, in the "Eye and Ear Department," 149 cases of diseases of the ear, and 352 cases of eye diseases.

Correspondence.

Maternal Longings and their Influence on the Fœtus in Utero.

Ed. Med. and Surg. Reporter:—

The old superstition, as old as humanity itself, almost, that strong maternal shocks or impressions during pregnancy may so affect the fœtus in utero as to produce some strange and monstrous deformities, is receiving valuable corroboration lately in the prominent medical journals of two hemispheres. The testimony elicited, however, is universally in favor of strange sights or sudden frights, as the result of dreams, or of actual experience. I have never yet seen anything written on the unfulfilled maternal longings or desires, so frequent in this condition, in their relation to the fœtus in utero. That these longings or desires may have the same effect upon the unborn child as the strange sights or sudden frights so voluminously written upon of late, there can be no possible doubt. In proof of this, I detail to you below such cases as have come under my personal observation lately, or from sources that can be implicitly relied upon.

Mrs. W., a small, stout blonde, with coal black hair and eyes, of an exceedingly nervous temperament, is a native of Philadelphia, thirty-eight or forty years of age, now the wife of a produce merchant of this city. Although having aborted just two or three months previously, she became pregnant again in May, 1880. While yet advanced in the first or second month of pregnancy she was seized, one day, with an uncontrollable desire for cherries, which she succeeded in getting only at the expense of a great deal of trouble and searching, the season being very early and the fruit exceedingly scarce. These cherries were nicely assorted and placed on a dish by a window, ready for the evening meal she had planned for herself, when the respite from her household duties would enhance the luxury. Unfortunately, they were discovered here by her son, a young man of sixteen or seventeen years of age, a perfect dare-devil, reckless, incorrigible youth, who had just come home for his dinner, and who, upon seeing such a delicious dish before him, devoured them all *instanter*, stones included, and disappeared, unnoticed. The discovery of her loss so preyed upon the grievously disappointed woman that she became almost inconsolable, it being impossible to replace the dish for several weeks thereafter. When her child was born, a female, on the fifth of January last, I attended her, and upon separating the cord, I noticed a small, red, rounded and elevated spot on the left temple of the child, partly covered by the hair, an exact *fac-simile* of a full ripe cherry! This has since become so perfect in development, that it can readily be recognized by any one.

This woman is the mother of five children. The first, a daughter, now a young lady of twenty-two or twenty-three years of age, was "marked" in a manner nearly similar. While the mother was in the seventh month of pregnancy with this daughter she was taken with a "hankering" for blackberries, wholly out of season and impossible to procure. The result was, when the daughter came in to existence, several months later, a bunch of blackberries was found depicted upon her left buttock, all well formed and distinct, *which always became quite black when these berries were in season and dark brown at other times.*

The third child of this woman, also a daughter, has a large red ball back of her left ear, as the result of a playful movement on the part of her father, during her mother's earlier months of pregnancy, in tossing a carpet-rag ball towards the mother, suddenly and unexpectedly, which struck her back of her left ear. Thus it will be seen that three out of the five children of this woman are "marked," all females, and all on the left side of their body, at that.

A truly wonderful tale, however, is related to me by a friend, in whom I have the utmost confidence for veracity, under whose personal observation it occurred some years ago. The scene is laid in Montgomery County, Maryland, and the personage a young bride of four or five months. The husband and wife had been passing the day with her father-in-law, when the younger members of the family brought in a nice string of perch, caught by them in a neighboring stream. Among these perch was a particularly fine one, much desired by the young woman. During the whole cleaning and frying process she felt a peculiar desire for this particular fish, and sat eyeing it with increasing voracity as the meal progressed. Being of a very bashful and reticent disposition, however, she failed to make her desire known, the other members of the family being unaware of anything unusual with her. When the meal had been placed upon the table, and all were in readiness to partake, the first to fork into the dish of fish was the old gentleman, her father-in-law, who bore off the prize, the identical fish she earnestly craved for. She told it, long afterwards, that as the last morsel disappeared she involuntarily drew her hand across her lips to stay herself, so great was her desire. When her child was born, several months afterwards, a boy, across his upper lip, in very distinct outlines, was the figure of a fish, the impress being of a more intensely scarlet color than the general surface of the skin, and plainly recognizable by persons of the most meagre imagination.

The gentleman who related to me the above had a brother afflicted with a bunch of blackberries on the back of his neck, elevated a considerable fraction above the surface of the skin, the result of a caprice of his mother, under circumstances somewhat similar.

A more singular instance, however, than any related above, to my mind, occurred to an acquaintance of a friend of mine. The young lady, for such was the victim in this instance, bore a full-length impression of a perfectly shaped hair-switch upon her back, which extended from a point midway up her spine to the roots of the hair on her neck, necessitating the continual exercise of ingenuity, in the way of neck-gear, in order to conceal the deformity. This switch was of a dark-brown color, while the color of her own hair was black. The result came about by an intense longing on the part of her mother for a particular switch of this color, seen in the collection of a hair pedler, but which

she was unable to buy for the want of means, the family being very poor and needy.

Peabody, Kan. CHARLES H. MILLER, M.D.

Fracture of both Ligamenta Patellæ.

ED. MED. AND SURG. REPORTER:—

During a professional life of twenty years I have met with several cases of fracture of the patella, but fracture of both ligamenta patellæ at the same time has never occurred in my practice but once; and according to Hamilton, Erichsen, Druitt, Bryant, and others, it is of rather rare occurrence.

On December 13, 1880, I was called to see M. Flynn, a brittle-boned old fellow of fifty years, a section boss on the Central Railroad of Iowa. In carrying a part of a broken rail, while clearing the track for an approaching train, he made a misstep, the rail apparently striking the left knee, causing him to fall, and in attempting to save himself he fell backward upon his back, unable to rise until picked up by his men.

On examination I found both ligamenta patellæ broken. The left patella about three inches above and outward from the joint, which was considerably bruised and swollen. The right patella was about two inches upward and outward.

Assisted by Dr. Funck, an undergraduate, after some manipulation, the limbs were temporarily bandaged from above downward, and finally the dislocation replaced. Circular strips of plaster were applied, above and below the knees, with longitudinal and oblique strips connecting them. The limbs were elevated and placed upon splints, somewhat resembling Hamilton's. After a few hours the swelling of the left or bruised knee indicated the removal of all but four oblique strips, which seemed to partially retain the patella, while cold water and saline applications were continued until most of the inflammation had subsided, when the parts were again more particularly adjusted and strips applied. Not until about the eighth week other appliances were tried, to enable him to safely move about. But an old purple sore on the shin of the right leg, which would not tolerate any compression of blood vessels for even the simplest appliances, only requiring some exciting cause for an annual ulceration, as well as the sensitiveness of the left or bruised and more inflamed knee, delayed any effectual attempt to walk nearly another month. Then two circular pieces of strong pasteboard, one foot in length, were moistened and shaped behind the knee and over the adhesive straps, covering three-fourths of an inch of the circumference of the parts to which they were applied, and held in their place by other adhesive strips, thus allowing limited locomotion and bending of the joint, but not sufficient to refracture. Lastly, everything was removed and long, wide strips of surgeon's adhesive plaster were applied over and upon each side of each patella, which he continued to wear, even after able to work, as a support and preventive of a refracture. Not until nearly sixteen weeks did he resume his former position, but then apparently nearly as well as ever, and has lost no time since. O. B. HARRIMAN, M.D.

Hampton, Iowa.

Hybridity and Fecundity.

ED. MED. AND SURG. REPORTER:—

The remarks going the round of the press today in regard to "The Relations of Hybrid Marriages to Sex, in Offspring and Fecundity," do not accord with my experience and observation. There is, possibly, no country where there is a greater admixture of the races than is found in Central America. There we find first the Aborigines, the Indians, then the Negroes, and the Caucasian and the Mongolian and Asiatic races. These foreigners have married the Indians as a *rule*, but we find quite as many males as females; indeed, it is said, that were it not for the numberless revolutions, that kill off many males yearly, they would be greatly in the majority; as it is the females rule as to numbers.

A Frenchman married a pure Indian woman in Tegucijalpa, and the result is three boys and one girl. Another, an Irishman, married an Indian, and they have five girls and two boys. In none of these admixtures, to my knowledge, is there an exclusively female offspring. We find the same in Canada, where many white women have married negroes, and their offspring is usually mixed. Among the Indians of Central America, where the virtue of a woman is not considered the greatest treasure she may possess, but rather an offspring from a passing foreigner, which passing foreigner is often led astray, the result is a mixed sex, the male offspring bearing the name of its father. Hence we find Smith and Jones, and Robinson, as well as many French and German names, and other nationalities, among these Indians.

Dr. Granville says that the female sex is caused by the arrest or repression of the force of development, and that the function of the male is not one of production, but of fecundation; then what difference should there result in the sex, whether the fecundating sperm be that of the Negro, or Chinaman, or the Caucasian ovum?

Detroit, Mich. E. E. RIOPEL, A.M., M.D.

Hybrid of Measles and Scarlet Fever.

ED. MED. AND SURG. REPORTER:—

Since the increased prevalence, latterly, of *rötheln*, or German measles, all facts bearing upon its nature are interesting. The question having been raised whether it is an entirely independent disease or a *hybrid* of scarlet fever and measles, it is important to determine whether it is possible for a combination of these two exanthemata to occur under circumstances which leave no doubt in regard to the nature of the case. Such an instance I believe to have been presented in the following case, in the practice of Dr. William E. Magruder, an experienced practitioner of Olney, Montgomery Co., Maryland. The narrative was forwarded by him at my request, and is respectfully offered for insertion in the REPORTER.

HENRY HARTSHORNE, M.D.

Germantown, July 2d, 1881.

On January 26th, 1876, I was called to see Miss S., aged fourteen, and found her suffering from an attack of scarlet fever of moderate

severity. The case pursued a typical course from the appearance of the eruption to desquamation, and was followed by no sequelæ.

On February 4th I was called to see an older sister, and a brother, aged eight. They had both been sick for several days, and as an eruption was just beginning to appear, I supposed they were cases of scarlet fever, notwithstanding cough, running at the nose, redness, and watering of the eyes.

When I called the next day, the mother told me that the eruption of these cases was not like that of the other, and such I found to be the case. That on the young lady was the well-marked eruption of measles; and I ascertained, then, that they had been exposed to the contagion of measles about two weeks previous to this.

On examining the boy I found the papillæ of the tongue very prominent through the coating, and it afterward presented the peculiar "strawberry appearance."

The fauces were red, almost livid, the tonsils and cervical glands much swollen, and he was suffering very much with earache. The eruption on his face and most of the surface of the body and limbs was clearly that of measles, but on the abdomen and some parts of the arms was the finer and more scarlet eruption of scarlatina. Wherever this finer eruption appeared there was considerable itching, and the little fellow would frequently ask to be rubbed with lard, to allay it.

The symptoms of measles predominated throughout. After the decline of the eruption all those parts which were covered with that of measles were rough, while on those on which that of scarlet fever appeared the cuticle came off in flakes. There were no sequelæ except an abscess in the ear.

Just twelve days from the commencement of the measles in these two, the young lady who had scarlet fever was taken with measles, which pursued the usual course of that disease.

News and Miscellany.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service. April 1st, 1881, to June 30th, 1881.

Bailhache, P. H., Surgeon. Detailed as chairman, Board of Examiners. April 5th, 1881.

Wyman, Walter, Surgeon. Detailed for temporary duty as medical officer, Revenue Barque "Chase." May 31st, 1881.

Long, W. H., Surgeon. Detailed as member Board of Examiners. April 5th, 1881.

Murray, R. D., Surgeon. To proceed to Memphis, Tenn., assume charge of the Service at that port, and inspect the Service at Vicksburg, Miss. April 8th, 1881.

Purviance, George, Surgeon. Detailed as recorder, Board of Examiners. April 5th, 1881.

To proceed to Richmond, Va., as inspector. April 30th, 1881. Detailed as chairman, Board of Survey, to examine applicants for admission to the Revenue Marine Service. May 10th, 1881.

Doering, E. J., Surgeon. Granted leave of absence for thirty days from April 21st, 1881. April 2d, 1881.

Austin, H. W., Surgeon. Granted leave of absence for thirty days from May 5th, 1881. April 2d, 1881.

Gassaway, J. M., Passed Assistant Surgeon. To proceed to Philadelphia, Pa., and assume charge of the Service, relieving Passed Assistant Surgeon Stoner. April 7th, 1881.

Smith, Henry, Passed Assistant Surgeon. To report to chairman, Board of Examiners. April 25th, 1881.

Stoner, G. W., Passed Assistant Surgeon. To proceed to Portland, Maine, and assume charge of the Service, relieving Surgeon Doering. April 7th, 1881.

Fisher, J. C., Passed Assistant Surgeon. Detailed as recorder, Board of Survey, to examine applicants for admission to the Revenue Marine Service. May 10th, 1881.

Wheeler, W. A., Assistant Surgeon. Granted leave of absence for thirty days (he providing a substitute) from July 7th, 1881. June 23d, 1881.

Carmichael, D. A., Assistant Surgeon. To proceed to New York, N. Y., and report to Surgeon Fessenden, for duty. April 7th, 1881.

RESIGNATION.

Doering, E. J., Surgeon. Resignation accepted by the Secretary of the Treasury, to take effect May 20th, 1881. April 2d, 1881.

PROMOTION.

Gassaway, J. M., Surgeon. Promoted to be Surgeon from May 21st, 1881. May 16th, 1881.

Howard's Method of Artificial Respiration.

At this season of the year it will not be inappropriate to republish Dr. Benjamin Howard's latest revised rules for the treatment of the drowned, still-born, etc. He calls it the "Direct Method of Artificial Respiration."

1. *Instantly* turn patient downward, with a large firm roll of clothing under stomach and chest. Place one of his arms under his forehead, so as to keep his mouth off the ground. Press with all your weight two or three times, for four or five seconds each time, upon patient's back, so that the water is pressed out of lungs and stomach, and drains freely out of mouth. Then

2. *Quickly* turn patient, face upward, with roll of clothing under back, just below shoulder blades, and make the head hang back as low as possible. Place patient's hands above his head. Kneel with patient's hips between your knees, and fix your elbows firmly against your hips. Now, grasping lower part of patient's naked chest, squeeze his two sides together, pressing *gradually* forward with all your weight, for about three seconds, until your mouth is nearly over mouth of patient; then, with a push, *suddenly* jerk yourself back. Rest about three seconds; then begin again, repeating these bellows-blowing movements with perfect regularity, so that foul air may be pressed out, and pure air be drawn into lungs, about eight or ten times a minute, for at least an hour, or until the patient breathes naturally

Note.—The above directions must be used on the spot, the first instant the patient is taken from the water. A moment's delay, and success may be hopeless. Prevent crowding around pa-

tient; plenty of fresh air is important. Be careful not to interrupt the first short natural breaths. If they be long apart, carefully continue between them the bellows-blowing movements as before. After breathing is regular, let patient be rubbed dry, wrapped in warm blankets, take hot spirits and water in small occasional doses, and then be left to rest and sleep.

Curious Sanitary Discoveries.

A municipal laboratory was not long since opened to the public in Paris, and many of its discoveries have been as curious and unexpected as they promise to be useful. For a small fee anybody can have analyzed samples of food, drinks, or anything connected with public hygiene. Among the articles in which adulteration was chiefly detected were wine, butter and milk. The adulteration of wine consists principally of its being colored with fuchsine, and in many cases it does not contain a particle of the juice of the grape. Milk is deprived of its cream, and abundantly watered, and butter is frequently composed of anything but the ingredients of milk. Several samples of butter were found to be made with oil or suet, which were easily separated, and shown to the visitors who accompanied the Prefect of Police to witness the experiments that were being performed in the laboratory. A sample that was exhibited as cream, which appeared as natural as possible, and of excellent flavor, was declared to have been manufactured with the residue of some red dye, mixed up with oil and sulphuric acid, in certain proportions. Some children's toys were examined, and those painted with red and blue were almost always found to contain poisonous substances, consisting principally of lead and copper. Even articles of perfumery were examined, which brought to light the most extraordinary examples of the skill brought into requisition for the accomplishment of fraudulent practices, for in several samples of scents of the most exquisite perfume they were found to be manufactured with other material than the essential oils of the flowers which they were intended to represent. But the most important discovery made was the presence in the nipples of some feeding bottles of a mass of vegetation, of cryptogamic nature, which, according to Dr. Faurel, bears a great analogy to the aphthous condition of the mouth frequently found in infancy, and he has induced the Academy of Medicine to investigate the matter, as he believes the condition referred to to be the origin of the intestinal affections, and particularly that form called "athrepsia," to which infants brought up by the bottle are subject.

Hindu Plan of Purifying Rooms.

Dr. Fred. J. Mouatt, formerly Professor of Medicine in the Medical College at Calcutta, says, in a recent lecture:—

The Hindus of every part of India with which I am acquainted have, from time immemorial, possessed a means of purifying the atmosphere of their rooms and huts, by spreading a light coating of a mixture of earth containing organic matters, on their walls and floors, which enables them to dispense, to a considerable degree, with ordinary ventilation. The process is called "leoping," and is usually performed by the women of the household. With a view to submit this proceeding to a practical test, I had four cells in the Presidency jail of Calcutta, each containing 480 cubic feet of air and practically unventilated, carefully prepared. Two of them were limewashed throughout, and the two others "leoped." I had four healthy prisoners locked up in them at night, one in each cell. On opening the cells next morning, the two which were limewashed were stuffy and offensive, redolent of the peculiar animal odor exhaled by native prisoners in such circumstances. The two others were as fresh and pure as if no one had slept in them.

The International Medical Congress.

The daily programme of the International Medical Congress has been published. It begins Tuesday, August 2d, at 10 o'clock A.M., and closes Tuesday, August 9th. Meetings and excursions are arranged for each day. The Royal Botanic Gardens and the Zoological Society Gardens will be open, free, to members, on every day of the week. The Lord Mayor will give a banquet. The medical officers of the principal hospitals will be prepared to receive such members as desire to visit these institutions. Numerous soireés and receptions will form part of the entertainment. Special addresses will be delivered by Prof. Maurice Raynaud, of Paris, on "Le Scepticisme en Médecine, au temps passé et au temps present;" by Dr. Billings, of Washington, on "Our Medical Literature;" by Prof. Volkman, of Halle; and by Prof. Huxley, F.R.S., D.C.L., on the "Connection of the Biological Society with Medicine."

A large number of American medical gentlemen will be present, both as interested spectators and as representatives of various medical bodies in this country. We shall give in the REPORTER a full account of the proceedings of the Congress.

President Garfield's Wounds.

Our readers have all, no doubt, become familiar with the details of the attempted assassination of President Garfield, and with the description of the wounds and their treatment, as detailed at length in the daily papers. A very minute and full report of the medical attendants is in preparation and will be published in due time.

There is considerable difference of opinion among recent authorities on military surgery in reference to the treatment of wounds penetrating the abdominal cavity. This difference principally lies between the extreme advocates of "Listerism" and those who continue the methods in use before the introduction of antiseptic precautions. The former condemn all probing of the wound, and hence all attempts to find the ball. At any rate, if attempted, it should be done with the most complete antiseptic safeguards.

Up to the time of sending this to press, the treatment of the President, backed by the soundness of his constitution, seems to have carried

him out of immediate danger from the consequences of the assassin's shot. All honest men of every party and nation will wish him a speedy and complete recovery.

A Cheap and Active Antiseptic.

A writer to the *Lancet*, Mr. C. F. Kingzett, claims to have discovered a better antiseptic than carbolic acid or oil of eucalyptus, for use in surgery; at the same time it is chemically allied to the latter substance, and but for economical considerations can be produced therefrom. The product is an oxidized oil of turpentine; in other words, the product which he obtains by forcing a current of air through turpentine in the presence of water (or otherwise) during a prolonged period, lasting in practice from one to two hundred hours. By this process of air-oxidation the turpentine absorbs an enormous quantity of oxygen, increasing in density accordingly, and losing its very volatile character. Although the product is not strictly speaking soluble in water, it forms in contact therewith, or even in contact with any moist surface, such as is presented by every wound, certain principles which pass into aqueous solution. These principles are strongly antiseptic, and among them peroxide of hydrogen is to be numbered.

Health Pamphlets.

Clergymen, superintendents and teachers in Sunday schools are informed that the pamphlets entitled "*Health Hints*" for the care of children during the hot season, with *special rules* for the management of infants, can be obtained for distribution in the Sunday schools by applying at the Central Office of the Society for Organizing Charity, No. 1602 Chestnut street, any day, between 9 A.M. and 4 P.M., or on Saturday until 2 P.M. These pamphlets have been published by the Society in order to protect the health of our children, and it is desired that they may have the widest circulation. These pamphlets are also distributed by the police, by order of the Mayor, and are supplied to all dispensaries, hospitals, day nurseries and other institutions caring for children.

The Quarantine Question.

Dr. Robert B. S. Hargis, of Pensacola, has written an open letter to the National Board of Health, in which he deprecates coöperation of the National Board with State Boards, and urges the importance of quarantining all vessels which shall have crossed the Atlantic Ocean between 32° North and 30° South latitude, whether they come from an infected port or not. Dr. Hargis, as is well known to those who have followed the recent discussions on yellow fever, is an advocate of the deep sea origin of yellow fever.

The Land Origin of Yellow Fever.

Dr. Manuel Da Gama Lobo, has made an elaborate study of the causes of yellow fever, and has summed up his conclusions in a pamphlet just published in New York. With his microscopic researches is given a system of careful observations on the conditions of temperature, moisture, barometric pressure and direction of winds, during twenty-six years, in the city of Rio de Janeiro. The author believes he has fixed the origin of yellow fever in two places, Havana and Vera Cruz, as its chief nests, and he attributes it definitely to the poison of the "opunsia Mexicana." a species of infusoria, of the family of "bacillarum," which is found particularly abundant in the swamps and waters near those cities. Plates showing this species as existing in its native element and in yellow fever victims accompany the descriptions. The case is not put forth as one of absolute proof, but as a theory supported by strong probabilities. The author is physician to the Emperor of Brazil, and is a pupil of the distinguished Professor Virchow.

Items.

—The chiropodist first dates from William the Corncurer.

—An epidemic of homicidal mania is at present raging in this country. The most effective remedy in the treatment of this form of insanity is *hemp*.

QUERIES AND REPLIES.

Chronic Colitis.

MR. EDITOR.—If Wm. H. C., Ill., would prescribe for his patient all that has been suggested to him, he (patient) would be where he would need no doctors. Chronic colitis amounts to but very little within itself. But when the most absurd drugs are given there is no wonder it then becomes serious. Tr. aconite and tr. nucis vomicæ will cure chronic colitis every time. Why? Because they are generally indicated; aconite for inflammation, nux vomica to tone the bowels and arrest peristaltic motion. I discharge my patients of acute colitis in three days, chronic within nine.

Wilmington, Del. J. T. V. BLOCKSOM, M.D.

Ozone, Conn.—There is, in point of fact, nothing accurately known what relation, if any, the presence of ozone in the atmosphere bears to health. The starch paper used for detecting it is said, by good authority, to be no reliable index to the amount of ozone. The whole subject is one which requires investigation anew.

Water Cure, N. Y.—The bath known in Germany as the *Moorbad*, is one in which the soil taken from the vicinity of mineral springs is used. This soil is charged with salts and vegetable debris, and is stirred into the bath to the amount required, sometimes until the bath is, in fact, one of thin mud. We do not know of any establishment in this country where this is in use.

Dr. L. D. K., of Pa.—The expenses of living in London do not differ materially from what they are in New York or Philadelphia, which is to say, that for board and lodging it will cost you from a dollar a day upward.

MARRIAGES.

TULL—SCALES.—On May 17th, by Rev. Simmons, Dudley G. Tull, M.D., of Yorkville, Gibson Co., Tenn., and Sallie N., youngest daughter of Major Wm. Scales, of Friendship, Crockett Co., Tenn.

REYNOLDS—MORRIS.—At Covington, Ky., July 13th, 1881, Dudley Sharpe Reynolds, M.D., of Louisville, and Mattie Withers Bruce Morris, of Covington.

THE

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Original Department.

Communications.

INDIGESTION—DUE TO ORGANIC DISEASES.

BY CHARLES R. CRANDALL, M.D.,
Of Philadelphia.

In a previous article attention was called to "Indigestion due to Nervous Influences." At this time it is proposed to allude to the importance of searching for the cause of indigestion in organs more or less remote from the alimentary tract. In the present age it may seem superfluous to make allusions of such a character, but the fact is, too much can never be said regarding the omission of seeking causes and the commission of treating symptoms instead of the disease.

It is remarkable to what extent indigestion, of greater or less severity, may be dependent upon different forms of organic disease. In many instances it is difficult to explain why this is so, while in a larger number of cases it is difficult to detect the existence of any organic disease, owing to masked symptoms, and a general obscurity not unusual in the different stages of structural changes. Hence, there constantly exists the importance of bearing such facts in mind, and of making frequent and thorough examination whenever indigestion is marked and persistent.

The detection of organic disease of the heart not infrequently overturns a previous diagnosis of simple indigestion. When such is the case, it is found that indigestion has existed as a correlative symptom, and one that is usually due to disordered circulation, caused primarily by pericarditis, hypertrophy, valvular lesions, or, possibly, by a combination of the two latter. Pericarditis, as many doubtless know full well, is often difficult to diagnose. A marked peculiarity of the disease is the fact that, in many instances, pericardial symptoms are latent, while prominent symptoms are developed elsewhere. In some cases the heart affection is scarcely distinguishable from pleurisy, in others, delirium may be so marked as to mask the heart symptoms, and, lastly, it may give rise to such distinct evidences of acute gastritis as to deceive both patient and physician. In the latter instance there will usually be persistent nausea, vomiting, epigastric pain and tenderness, of a character well calculated to obscure a latent or illy defined cardiac affection.

Of the more chronic forms of heart disease, hypertrophy not infrequently produces disturbances of digestion even before the heart symptoms attract attention. In instances of this nature increased arterial pressure causes hypercirculation and hypersecretion along the alimentary tract, followed by loss of appetite, a sense of fullness after eating, and more or less nausea and vomiting. But of all the forms of heart disease, dilatation accompanied by valvular lesions causes the most marked derangement of the process of digestion. Sooner or later, as a rule, the functions of digestion and nutrition will become impaired, and persistently exist as a general characteristic symptom of the primary disease. Many cases are recorded where loss of appetite and distention of the stomach preceded symptoms referable to an affection of the heart. Thus a gentleman, about fifty years of age, who had led a gay and somewhat dissipated life, noticed that he experienced difficulty in breath-

ing. He complained also much of loss of appetite and distention of the stomach. There could not be found any cause beyond flatulence to account for this; the abdomen yielded all over an extremely tympanitic sound. But to the dyspnœa, an inquiry into the state of the heart furnished a clue (Da Costa). It is, however, in the more advanced stages of valvular lesions that indigestion exists as a prominent symptom. Insufficiency and regurgitation causing constant stenosis of the venous system often sets up a catarrhal condition of the stomach not greatly unlike an idiopathic gastric catarrh. In a recent case of valvular lesion, seen by the writer, the regular medical attendant had been misled by the gastric symptoms and had administered freely agents intended to overcome what appeared to him to be "biliousness."

When the valvular lesions are sufficient to give rise to dropsy, the gastro intestinal symptoms are still more marked. Hence it has been said that the loss of albumen and salts has the effect to prevent osmosis into the vessels of fluids in the tissues, which therefore accumulate, and the hepatic derangement and chronic gastric catarrh, which interfere very seriously with digestion and absorption of products. The appetite is either wanting or capricious; food distresses the stomach; the intestines are filled with gas, the result of decomposition of different forms of food; and diarrhœa, which nothing controls permanently, comes on toward the close (Bartholow). Hence, among the exciting causes of dyspepsia must be reckoned diseases of the heart, nearly all of which, in their latter stages, are accompanied by a disturbance of the digestion, tending to accelerate the fatal issue (Trousseau).

Again, indigestion may be a marked symptom of organic changes in the lungs. Unfortunately, a certain form of cough is sometimes associated with indigestion, and, as a result, many cases of phthisis are unrecognized for a long time, owing to the inference that the cough is simply a "stomach cough." The fact that indigestion and a real phthisical cough may precede subsequent marked evidences of pulmonary disease is lost sight of. Indigestion and coughs, being thus deceptive at times, call for a careful and repeated investigation of the lungs whenever these symptoms are found to exist. In a résumé of the general symptoms of consumption it has been said, the digestive organs are generally out of order. Loss of appetite, thirst, and dyspeptic symptoms are often complained of. Not uncommonly, the mouth, tongue and throat are red and irritable, this being accompanied with signs of subacute gastritis. The tongue is frequently more or less furred. In some instances the stomach is extremely irritable, retching and vomiting being immediately excited when anything is taken (Roberts).

Again, in the "Clinical History of Phthisis," the following admonition has been given: As regards appetite and digestion, there is much diversity in different cases. In general, the desire for food is diminished, and the ability to digest food impaired. In some cases there is almost entire loss of appetite, and even a repugnance to food. This is an unfavorable feature of the disease. Disorder of the digestion is sometimes so prominent as to appear to be the chief malady. The physician should be on his guard against considering cough, in such cases, merely dyspeptic or sympathetic (Flint).

Intestinal indigestion may also be one of the primary symptoms of organic disease of the lungs. Upon this subject the same author has observed: Diarrhœa occurs in the first stages (consumption) in a certain proportion of cases. It may exist with and without tuberculous affection of the intestinal canal, usually seated in the small intestines. Persisting or frequently recurring diarrhœa, accompanied by cough, be the latter never so slight, should excite suspicion of pulmonary phthisis, and the existence of this affection being ascertained, a tuberculous affection of the intestinal canal, as a secondary affection, is probable (Flint).

Thus do some of the great teachers of the profession emphasize the frequency of indigestion preceding or existing as a symptom of organic disease of the lungs. Such facts and such authority declare the importance of alertness and skill in diagnosis, in order that the physician may find for himself what has not been observed by the patient.

That indigestion is usually a symptom of functional and organic diseases of the liver is well known both in and out of the profession. In fact, it is too well known out of the profession, inasmuch as limited information tends to cause many persons imaginary "spells" of "congested liver," "torpid liver," and "biliousness." Not often is the liver overlooked when symptoms of indigestion exist. In too many instances is it referred to not so much for what it discloses as for what it conceals. An organ so admirably located and adapted for the concealment of ignorance, and so inspiring to the reflections of the superannuated, will ever hold the attention of the wise and the otherwise. Being thus an organ well known, and at the same time not well

known, makes it all the more necessary that its symptoms should receive intelligent study. Among the special diseases of the liver, acute congestion often, or perhaps invariably, deranges digestion. Under such circumstances indigestion will be characterized by a coated tongue, nausea, vomiting, loss of appetite and disturbance of the bowels. Indigestion due to chronic congestion of the liver is very common. In this morbid condition indigestion may be so marked as to simulate chronic gastritis. As in acute congestion, there will be a coated tongue, impaired appetite, nausea, constipation or diarrhœa, and besides, more or less pain in the region of the stomach and liver. It has been clearly stated that chronic hepatic congestion, as, indeed, any disease of the liver which leads to its enlargement, may be confounded with chronic gastritis; and on account mainly of the fullness in the epigastric region which may happen in the hepatic malady, and which is so constant in gastric affection. (Da Costa).

Likewise, indigestion may, for a long time, be the chief symptom of cancer of the liver. There is, usually for an indefinite period, most of the gastro-intestinal derangements mentioned above, and until unmistakable pains, together with no dules, or marked enlargement, is detected in the organ, it will be very difficult to say why persistent indigestion should exist. Digestive derangements are necessarily present in most cases, and they frequently first attract attention. The cancerous cachexia is usually well-marked, being accompanied with rapid wasting, debility, and anæmia (Roberts).

The early stages of cirrhosis of the liver rarely give rise to symptoms which establish the disease beyond a doubt. As a rule, it is not until dropsy becomes evident that cirrhotic degeneration can be determined. But in all cases there are, from the first, many symptoms of indigestion. These symptoms vary in number and severity, from nausea and vomiting to extreme gastro-intestinal derangements. There is often persistent nausea, vomiting, chronic gastric catarrh, pain in the region of stomach and liver, occasional vomiting of blood, and attacks of diarrhœa. In addition, it may be said: Again, in other cases, before symptoms referable to the liver manifest themselves, gastro intestinal disorders, gastro-intestinal catarrh, occur. The appetite is poor and food occasions distress; there is acidity and acid matters are regurgitated; often, in the morning, there is much nausea and great straining. some acid, glairy mucus and bilious matter, coming up after much effort. The bowels are sometimes relaxed, sometimes constipated, and now and then blackish, tar-like, semi-solid discharges occur (Bartholow).

Indigestion attended with hemorrhage from the stomach, may also be due to a cirrhosed liver. In such instances interference with the portal circulation has caused more or less congestion of the entire surface of the alimentary tract, which, at times, may be so extreme as to rupture capillaries of the stomach, and thus produce hemorrhage. Thus hemorrhage from the stomach and bowels is an occasional event. Gastrorrhagia occurred in six out of forty cases analyzed, the histories of all cases not being complete (Flint).

From these brief allusions to a few of the diseases of the liver, it is evident that indigestion is dependent thereon. Moreover, the mind must be struck by the following impressive words: Dyspepsia is a very usual epiphenomenon of disease of the liver, and it is easy to understand that an organ which is the largest gland in the body is immediately related to the stomach, performs a very important part in digestion, has exceedingly intimate sympathies with the other parts of the gastro-intestinal apparatus. It is easy I say, to understand, that the disturbed action of which it is the seat reacts more or less powerfully upon the functions of the stomach. Hepatic will often be taken for gastric pains. The occurrence of errors of diagnosis are quite accounted for by what we know of the relations of contiguity between the stomach and liver (Trousseau).

The kidneys are chief among the organs which tend powerfully to influence digestion. When different organic changes attack these important organs, indigestion invariably ensues, giving rise to symptoms calculated in the highest degree to deceive both patient and practitioner. In very many instances, the symptoms referable to the organs of digestion will be most marked, while those pertaining to the kidneys attract no attention until renal disease is far advanced. By way of illustration: This was a case of a single lady, aged forty-three years, seen by one of us, in connection with an eminent physician of Philadelphia. She had been, at times, under his care for a year, with dyspeptic symptoms, but otherwise appeared in fair health; there was not a particle of dropsy. Spending the summer at the seashore, she had not been under observation immediately before the fatal illness, and sent for her physician in consequence of nausea and vomiting, and some shortness of breath. A marked pericardial friction sound was detected,

and an examination of the urine showed it to contain about one-third of the test-tube full of albumen and granular tube casts. The malady became now as markedly vehement as previously it had been latent; twitching of the muscles, followed by general convulsions, set in. These were succeeded by uræmic coma, and death took place about a week after the development of pericarditis. The post-mortem examination proved that the kidney disease was of long standing, and that the contraction of the organs had advanced very far (Da Costa, Longstreth).

In cirrhotic disease of the kidneys, which, above all other forms of renal affections, is latent and deceptive, indigestion, persistent and severe, may long precede any clinical evidences of the real disease. For months before the diseased state of the kidneys is recognized, there may be impaired appetite, acidity, vomiting and persistent constipation. It has been observed that, at first, in this disease, the appetite and digestion are good, and the nutrition of the body continues unimpaired. Presently, distress after eating, even epigastric pain, flatulence, and irregularity in the stools, are experienced. Acidity, pyrosis, depressing nausea with headache, come, as the case progresses, to be very constant symptoms. The body weight declines, the skin becomes dry, scurfy, and of a dead yellowish-white or fawn color, and the hair appears dry and lifeless (Bartholow).

Indigestion invariably precedes or is associated with the development of some of the other forms of organic diseases of the kidneys. But the "waxy" and "fatty kidney" give rise to indigestion, usually of a marked and distressing character. Thus, in the "Clinical History of Chronic Bright's Disease," it is said: Symptoms referable to the digestive system are more or less prominent. Indigestion or dyspeptic disorder is common. Flatulence of the stomach is a frequent symptom. Vomiting is a prominent and persistent symptom in certain cases. It is referable to the vicarious elimination of urinary principles by the gastric mucous membrane. It may be preceded or accompanied by other symptoms denoting uræmia, but it is sometimes the chief uræmic manifestation. The uræmic vomiting occurs when the stomach is empty, and often early in the morning. The acts of vomiting are apt to occur suddenly and violently, without much previous nausea. These circumstances connected with vomiting should always excite suspicion of renal disease, although no other symptoms pointing to the kidneys are apparent (Flint).

Doubtless there are many cases of indigestion dependent upon a torpid or congested state of the kidneys. There may be entire freedom from structural degeneration, but rather a condition existing which tends to retard the full excretion of urinary elements. Hence, in many cases of indigestion, when remedies are given to stimulate and restore the gastro intestinal secretions, much good can also be done by gently stimulating the renal functions and thereby relieving the system of pent-up accumulations. Renal affections, or to speak more correctly, affections of the urinary apparatus, are likewise frequent causes of dyspepsia, particularly of old men. When consulted by elderly patients who complain of impaired digestion, loss of appetite, gastric pains, belching and vomiting, direct your attention to the state of the kidneys and bladder, and you will often find that the only urinary symptom complained of is a habitual retention of the urine (Trousseau).

There is also one more organ to which reference will be made in a few words. The frequency of indigestion as symptomatic of both functional and organic diseases of the uterus makes it almost unnecessary to allude to the fact. This organ at times exerts a most powerful influence upon the entire female system, but the effects are usually most marked upon the functions of digestion. There is hardly a diseased condition of this organ that is not attended by gastro-intestinal symptoms, such as impaired appetite, flatulence, nausea, vomiting and constipation. These facts are familiar to every practitioner, and need no confirmation from the great teachers of the profession.

It is probably safe to say that indigestion is the most common complaint which the physician is called upon to treat. It is a disorder that may exist as a distinct affection of the alimentary tract, or it may be symptomatic of nearly every functional and organic disease to which the system is liable. Many diseases exist for a long time in obscurity, and this symptom, above all others, tends to lead or mislead. Such facts, together with the statements of some of the most eminent authorities in the world, point to the necessity of patient inquiry into the cause of indigestion whenever found to exist. True, indigestion is so common and has so many causes that, in many instances, it means little or nothing, but the possible fact always remains that it may exist preëminent as a symptom of deep-seated and obscure disease. To examine every patient intelligently and thoroughly is imperative. Nothing that tends to unravel disease or to help human beings is useless. There is nothing great

in medicine excepting faithful work and utility. Honest, patient, intelligent investigation into the causation of indigestion requires much general knowledge and special training, but it constitutes largely the average success of practitioners, for the reason that this class of cases are so common. "The truth is, to be successful in any profession, one must have what has been called 'an almost ignominious love of details.' It is an element of effectiveness with which no reach of plan, no loftiness of design, no enthusiasm of purpose can dispense."

HEADACHE AND NERVOUS EXHAUSTION, ITS CAUSE AND CURE.

BY EDWIN W. HILL, M.D.,
Of Glen Falls, N. Y.

It is a lamentable fact that, until within a recent date, the medical profession have been at least two generations behind the times in which they lived; and even now the older members look with distrust (to say the least) upon the younger portion of the fraternity who are anxious to get up to the times and avail themselves of any means to cure their patients. When Prof. Donders explained to the profession that defects of vision caused so much nervous suffering in the world, how was it received? Was the subject thoroughly investigated, and so proven to be either correct and adopted or incorrect and rejected? I think not. And even now only a few of the more advanced members are willing to leave off drugging and look to other sources for the cure of the patient. And here let me copy the words of Dr. Jones, of the Queen's University, Cork, Ireland, "How many an unfortunate might escape a world of drugging if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work, symptoms so often referred to the stomach—all corrected by suitable glasses." Yes, the time has come when the more enlightened part of our people have refused to allow their physician to practice the heroic treatment. It is no longer a theory, but a known fact, that headache, whether habitual or periodic, spinal irritation, dizziness, insomnia, nausea, inability to do mental work, general failure of health, and not a few of the many cases of St. Vitus' dance, are due to eye strain, and can only be permanently cured by the correction of the visual powers, and so remove the cause of irritation. The eye strain may exist and still the patient never experience any pain in the eye itself, just as in hip joint disease the seat of the trouble is in the hip and yet the painful part is the knee. Again, eye strain may exist for a very long time and cause no disturbance whatever, until the general health is weakened, either by mental or moral causes.

I prefer to prove these points by cases treated by myself, rather than bare assertions, and so I will give some in detail.

The following case, Miss R., the beloved granddaughter of an M.D., I will give in the words of the Doctor himself:—

"In accordance with your expressed wish for a concise history of her case up to the time she came under your care, I will now give it to you. Miss I. C. R., of Moreau, Saratoga Co., N. Y., aged 24 years, light complexion, brown hair, blue eyes, nervous temperament, etc., etc. For six years previous to June, 1875, she attended school. She was a close student and indefatigable in her efforts to succeed. Her health began to fail before half of her term of scholarship was finished; still she would not give up, and struggled on, having a severe pain in the head, neck and shoulders; through the eyes, at times, it was piercing and unbearable. She had set her mark and was not to be deterred from attaining it. She succeeded, as many others have done, with health, mind and constitution weakened. She graduated in June, 1875, and since has been striving to recuperate; at times she has, in a measure, succeeded, and enjoyed a fair degree of health, but still the old pain in her head, eyes, and along the spine has continued.

"During the winter of 1876 she had an attack of congestion of the brain, and was confined to a room, without a ray of light, for six weeks. It was four months before she was able to sit up all day. She made a fair recovery, only there was great nervous excitement and the least exertion would cause a day's sickness in bed. Since her long sickness, generally in the winter, she has had a slow nervous fever, lasting from three to five weeks. During the past winter the pain in the head has been intense and constant, but for short intervals, the eyes frequently becoming obscured and the brain confused; I feared permanent injury to the brain. Upon the advice of a lady friend of hers, whom you had cured, I, although skeptical, sent for you to come and examine her case. And when you said you could cure her I had fearful doubts. And now, after an absence of seven weeks, she has returned, the pain in the head gone, and for the past five weeks she has not had as much pain as before she had in an hour. The circulation perfectly restored, the heat in the head is gone, the extremities are warm, and a perfectly normal con-

dition of the whole system; her strength is improving, appetite good; for all of which she cannot be too grateful to Dr. Hill.

"Yours, B. F. Cornill, M.D."

Upon examining Miss R. I found that there was just eye strain enough to prevent her ever getting strong, and I found from the examination no other cause, and therefore I could, with assurance, say this is a case that I can cure. She has since attended the Doctor in a painfully protracted and fatal illness, and her strength is good and she well.

Miss J. C., the daughter of a wealthy manufacturer, a well developed, healthy looking young woman, consulted me, complaining that she had struggled through her education with constant fatigue and headache, and for the last year the pain in the lower part of the back had been so severe that she feared some spinal or uterine disease. She had been at home about a year, during which time she had been a good deal under the family physician's care, on account of the pain and her nervous condition. She had a pair of glasses that she had tried to wear, and see if they would help her. They did not accurately correct her defect, astigmatism, therefore, they did no good, if they did not make her worse. I corrected her astigmatism with a (— cyl.) glass that she wears constantly. The internal recti muscles of the eye had become very much weakened, from overwork; these I strengthened by the prism exercise, and in four weeks, instead of the poor nervous sufferer that she had been, she commenced taking painting and music lessons again; a thing she assured me she never expected to do.

Mrs. M. B., aged about forty-five years, came to my office complaining that ever since her married life she never had gone over a month without having a sick headache, which would last sometimes for three days, during which time she would be almost blind with the pain, from the light striking into her eyes. Again, sometimes, she would have the headache almost every week of the month, for a day or so. After taking twenty prism exercises, she went a whole year without the headache returning.

Miss J. W., one of our most educated and refined ladies, consulted me as to what could be done for her, and it was a sad history; a life spent in hard work and close application to study, that she might enjoy the company of the best men by reading them through, finds herself a wreck, unable to sleep at night, and when sleep did come a troubled sleep. If she indulged in an evening entertainment then a sick headache was sure to follow the next day. Nervous and fretful in the extreme. I am pleased to say that the prism treatment has restored her to health and strength.

Mr. J. H., aged about 48, a prominent business man of his town, came to me to be fitted for a pair of glasses. I found that the left eye was slightly astigmatic, the right normal, and still he said that it was getting to be quite troublesome for him to read very much of an evening, as the words seemed to run together and look blurry. He also informed me that when they commenced business he did the book-keeping for the company, and that when he had to confine himself pretty closely to work, as at pay time, then he always was sick and nauseated, and had what they called a bilious attack, which would last from one to three days, but since they have kept a book-keeper he has been free from the attacks. Had his physician in his observation thought of cause and effect, and recognized that the bilious attack always followed close work in the office, and sent him to an ophthalmic surgeon, who would have corrected the slight astigmatism, $\frac{1}{60}$, by a (+ cyl.) glass, he would from that day have been cured of his bilious attack. To show that this is no bare assertion of mine I will quote a parallel case from Dr. S. Weir Mitchell's Report of 1876.

Mr. B., a prominent merchant, consulted me for pain in the upper spine and occiput. It increased day by day every winter, and left him during his summer, which was spent in fishing and shooting, a tent life, in fact. Mr. B. was even cauterized in New York for these pains, and here at home had much able advice besides my own.

When I first saw him I was thoroughly misled. It was late in the winter, and, as usual, while in the autumn only writing, at first, and then later, reading, and then any near work, caused pain, as time went by there came a time when all mental labor, when excitement, emotion, or any thought, caused pain. He was in this over-sensitive state when I saw him, and was aided by nothing I did. His holiday cured his head, and on his return some friend, I believe, suggested to him that his eyes might be weak, and with this idea consulted Dr. W. Thomson, who gave me the following additional particular from his note-book: "Writing has become so distressing to this gentleman that for a year past all letters have been written by a secretary, at his dictation. He states that a few moments spent in writing gives him a creeping sensation up the spine and through the back part of the head, followed by giddiness and severe pain, so urgent as to render him fearful of

a fit of some kind. His sight was, for distant objects, $\frac{1}{3}$, and was improved by a concave cylinder glass $\frac{1}{18}$, which he had obtained from a prominent ophthalmic surgeon, and with this his sight was $\frac{1}{1}$, or up to the normal standard; but despite this success his headache and other nervous symptoms were unrelieved.

It was suspected that this would prove to be a case of compound astigmatism, and that he had overstated the myopia on the previous examination, and that the diagnosis had been considered correct by obtaining the full sharpness of sight by a $\frac{1}{18}$ cyl. It was conceived that there might be latent hypermetropia, and that in overcoming a long-sighted meridian he would overstate a myopic one, and thus be provided with a correction for short sight, which would give sharp sight, but leave him hypermetropic, and, therefore, oblige him to keep his ciliary muscle in vigilant and constant exercise in viewing distant as well as near objects.

On paralyzing his accommodation with atropia this was found to be correct, and the hypermetropia was found to be $\frac{1}{36}$; his formula for the astigmatism was $+\frac{1}{36} \supset -\frac{1}{18}$ cyl. ax. 1°, and this correction gives him an acuity of vision $= \frac{15}{x}$ or above the average standard. On using these glasses habitually his distressing symptoms quickly disappeared. He has long since forgotten his apprehensions of an impending apoplexy or epilepsy. He can see as sharply as any of his companions, and he can use his eyes continuously in reading, writing, or other near work. Relief in this case followed, at once, the use of the glasses, which proved competent, without other means, to conduct him to perfect and useful health again.

In conclusion, let me again draw the attention of any who may read this article to the important facts—

1st. That headache, whether habitual or periodic, is in the great majority of cases due to eye strain.

2d. Eye strain, when it exists, will always cause the following train of symptoms: Pain in front or back of head; pain along the spine; nausea; insomnia; nervous irritability, nervous prostration, and often the following: Neuralgia of the head and face; palpitation of the heart, and atonic dyspepsia, all of which are not cured, but only relieved, by drugs. But remove the strain, either by glasses or prism treatment, or both, and you cure the patient.

—The heat has greatly increased deaths from tetanus and nervous diseases.

ON SOME POINTS IN THE MEDICAL TREATMENT OF HABITUAL CONSTIPATION.

BY J. W. HICKMAN, M.D.,
Of Delta, Pa.

The importance of being able to treat successfully the ailment in question cannot easily be over-estimated. Besides being a very common disorder, it is one that frequently taxes to the utmost the resources of the practitioner. Perhaps the error most frequently committed in its management is the indiscriminate giving of purgatives. Rarely does a patient apply to the physician for relief before he has given himself over to persistent purgation, and yet he not infrequently presents himself expecting further treatment in this direction. And too often, it must be admitted, is the physician led into such indiscreet practice. To serve more than a temporary purpose, active purgatives should find no place in the treatment of habitual constipation. Indeed, it were well, in most instances, if this class of drugs were altogether dispensed with in this connection. The temporary relief is more than counterbalanced by their harmful effects in even the most favorable instances. By their use we have, not infrequently, induced a chronic intestinal catarrh of a very intractable sort. Instead of restoring the bowel to its normal state, either with reference to the secretions or to contractility and tone, we find the torpor and general impairment of function intensified. Nor can they fail to disorder the digestive and nutritive functions.

As to laxatives, properly so-called, the verdict must be different. Both medicines and foods of this character, either alone or with other treatment, are very frequently of service, and occasionally are positively indicated. Especially is this true of the initiatory measures. In this paper we do not pretend to delineate every form of medicinal treatment, but it shall be our purpose to mention those agents which we have used extensively and have found to be of real service.

As coming first in the list, the writer must frankly confess his preference for belladonna. He, of course, does not mean to imply that it should be regarded as a specific, but that it will be found effectual in a vast majority of cases. In prescribing belladonna, two considerations must engage our closest scrutiny. In the first place, we should know that we have a pure drug, for it is well known that a large proportion of the belladonna preparations in the market are of an inferior grade. In the second place, the manner

of prescribing has much to do with the result. Prof. Da Costa, in a recent clinic, prescribed one drop of the fluid extract in one drachm of the compound tincture of cinchona. This I have tried repeatedly and with marked success. The belladonna may also be combined with other vegetable bitters, but for some reason it is more effective when given in Huxham's tincture. Instead of one drop of the fluid extract we may give four drops of the tincture, with equal confidence. Dr. Da Costa also advised, in connection with the above, one tablespoonful of sweet oil at bedtime, until the bowels became regular. This is a fair expedient, but I have been unable to see that it exerted any specially favorable effect. A laxative diet for the first few days is of more service. It must be admitted that it is not just easy to foresee in what cases belladonna may succeed or may fail, but that it may be used with confidence in a majority of cases, if given in proper dose and in purity, there is no question.

Another agent of value is nux vomica. Its results are somewhat variable, however. It is most useful in those cases attended with tardy digestion, flatulence and swelling of the belly. It is also serviceable in those instances of constipation occurring in those who are given to hypochondria, and are visited by quasi-paroxysmal pains through the stomach and bowels. It should be given just before meals, in the form of tincture; or, instead, five, six, or eight drops of the preparation known as the bitter liquor of Baumé may be prescribed.

We have also seen excellent results from the following:—

℞. Ext. nucis vomicæ,
Ext. belladonnæ,
Ext. physostigmatis, āā gr.v.
Ft. pill. No. xij. M.
Of these one should be given at bedtime.

In the treatment of constipation sometimes attendant upon chlorosis, no remedy so well answers the indications as aloes. In addition to the usual treatment, we may with marked advantage add from ½ to 1½ grs. per day. If there be amenorrhœa the aloes will serve a twofold purpose; it will assist the *prima viæ* to a better performance of function, and, being an emmenagogue, it will tend to restore or inaugurate, as the case may be, a regularity of the menstrual flow. If with the above condition of things, however, we have menorrhagia instead of amenorrhœa, the remedy in question must, of course, be withheld in favor of some more suitable agent. Again, no treatment could be more satisfactory than the management by aloes of that form of constipation dependent upon weakness and diminished power of contractility of the large intestine. Especially does aloes become the proper agent, if to this condition be added a "bilious state." Practically such an association is frequent, and may be effectually remedied by laxative doses of aloes. It will be remembered that the researches of Rutherford and Vignal have demonstrated the power of aloes to stimulate the hepatic functions and to increase the flow of bile. Experience, it must be added, has confirmed this conclusion.

Another highly efficient agent in the management of habitual constipation, and one by no means sufficiently valued, is podophyllin. Unlike many, and indeed most, other drugs of its order, podophyllin may be used a long time without any diminution in its efficacy. It agrees exceedingly well with the stomach, and hence may be relied upon where constipation is associated with even the most trying forms of dyspepsia. It has no effect, either direct or indirect, upon the womb, hence it is well adapted to the costiveness of pregnancy. It may also be used with advantage during the treatment of the various uterine diseases, or even during the menstrual period, and it is the best remedy with which to treat the constipation of old people. As is well known, its effect is slow; a small quantity at bedtime will usually act by next morning, but may not until the day following. Notwithstanding its tardiness the desired result is sure. When constipation is found to persist in spite of other agents it will usually yield to podophyllin. Sometimes, however, its use must be continued indefinitely, and without our being able to note much good result after its suspension. Such examples are rare, however. After the bowels are regulated it need not be given more frequently than once every other day, as a rule. And occasionally it need only be repeated upon days in which there is no stool. It is best given in doses varying from ¼ to ½ grain, in pill, with Jamaica ginger, to which a little extract of cannabis indica may be added, as recommended by Habershon.

Now, the remedies above enumerated are, as is well known, not the only ones used in the treatment of chronic constipation, but they are those from whose use we have derived the best results. We do not pretend to say that every case will yield to their power, for we find instances that stubbornly resist every possible resource that may be brought to bear. In conclusion, it must be remembered that failure will be the inevitable result of treatment without the persistent and faithful coöperation of the patient. For it

is by habit upon the part of the person treated that the advantages gained by treatment may be retained. No obligation should be more imperative than the adoption of a regular hour for attending to the duties of the water-closet.

Hospital Reports.

THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY FESSENDEN NOTT OTIS, M.D.,

Clinical Professor of Venereal Diseases.

Reported for the Medical and Surgical Reporter.

Enlargement of the Prostate.

This patient, gentlemen, was sent here by a physician under whose charge he has been for some time. I know nothing about the case, except that the physician says he has something the matter with his urinary apparatus. We will have the patient give his own history.

He says he is sixty years of age, and that he has had trouble with his urinary apparatus for about five months. He never had venereal trouble; but three years before his present trouble began he sat on the steps, and, he thinks, took cold, and on attempting to urinate in the night he could not. In other words, he had retention of urine, and the doctor came and drew off his water on two different occasions, after which he had no trouble until the present.

Here, then, we have a starting point. A man sixty years of age, who, three years ago, took cold, as he says, and afterwards had suppression of urine, necessitating the use of the catheter. This suggests enlargement of the prostate, for which we will make an examination, and if we find that such a condition exists, we need go no further. This is a common history in men past fifty-five years of age, but rare at an earlier age.

Before making an examination you should fill your finger nails with soap, then oil them; then let the patient stiffen the knees, and bend the body at right angles on the pelvis, the best position for inserting the finger into the rectum. On doing so, in this case, I find immediately an enlarged prostate. The normal size of the prostate is about that of a horse chestnut, and the shape is similar thereto; but here the prostate is as large as a lemon, and it warrants me in the inference that it has produced an obstruction in the manner which I mentioned to you last week. Now, it is only by such an examination that you can determine with certainty that there is enlargement of the prostate, for other conditions simulate the same trouble. Observe, from this diagram, the condition which exists in this patient; here is the prostate, under the urethra, at the neck of the bladder, which, on becoming enlarged presses upon the urethra at this point, more or less occluding it, the occlusion being more nearly complete the more the patient strains when micturating, the urine beginning to dribble faster when he ceases to strain. Now, this patient's symptom, suppression of urine, came on suddenly, whereas, one might suppose the urine would begin to flow more and more slowly, and finally cease to flow altogether. But such is not the case with these patients. This man, you remember, first had temporary trouble with passing his water, which he says disappeared entirely for a long time, and even now he can pass a pretty good stream. Now, if there is one thing which a man is more likely to forget about than another, it is what he used to do in the way of urinating. The stream may gradually get smaller and smaller, and the patient get used to the fact, so that he supposes he passes about as large a stream as ever. He says he makes his water very well, meaning that it does not cause him pain, and that it does not take him a great while longer than it used to do. This patient says he does not think it takes him longer than it used to do, but that at one time it did, and it caused him pain. He does not think, however, that he makes his water now as freely as many people do. You see, he, too, is forgetful. If it do take such patients a little longer to urinate, they don't think it amounts to anything; it does not indicate any special trouble.

The reason why a sudden suppression occurs, as in this case, is, that the patient takes cold, is exposed to a sudden change of temperature, a congestion of the prostate takes place, just as of the head when we take cold there. Congestion, and consequently enlargement of the prostate thus takes place suddenly, sufficiently to close the urethra. It is liable to occur, however, from another and a common trouble, close in their neighborhood, namely, hemorrhoids. The prostate being sympathetic with the inflamed hemorrhoids, enlarges, and occludes the urethra and shuts off the urine. Old men having a slight attack of piles frequently find their water cut off, and they attribute it altogether to the piles, little suspecting that they have another more important trouble, one much more difficult to get rid of, namely, enlargement of the prostate. This patient has quite considerable enlargement of the prostate, and yet he does not complain at present of being troubled by it. How shall we explain that fact? In this way. The prostate, as you know, is composed of three lobes, the middle, and the two lateral. It is enlargement of the middle lobe that occludes the urethra by pressure; the lateral lobes may be enlarged quite considerably, and produce no inconvenience, except, perhaps, some trouble in defecation, and they are rarely enlarged to such an extent as to occasion difficulty in that respect.

Another point in the diagnosis in these cases is, to have the patient pass all the urine he can, then introduce the catheter into the bladder and see if any remains. Sometimes quite a large amount can be drawn off afterward. We get some here, which makes the diagnosis certain. This residual urine has quite a strong ammoniacal odor, indicating that it has been in the bladder for some time. (Observe that, as I withdraw the catheter, I compress the ends, so as to prevent dropping urine on the clothes of the patient and the bedding.) You will remember that I explained to you last week how enlargement of the prostate practically elongates the urethral canal; that the normal urethra measures about eight inches, and any measurement beyond that, in a case of prostatic enlargement, may be considered

due to elongation of the canal from such enlargement. Now, when a patient comes to you with retention of urine, it is a good plan to percuss over the bladder, and determine, if possible, about how much water is in the bladder; if there be a great deal it will be better not to draw off more than a pint, or a pint and a half, at one time; wait then a few hours, and withdraw more, and thus, little by little, gradually empty the bladder. When the bladder contains much urine its walls have been distended, and upon the withdrawal of all, its surfaces fall together, an irritation is set up, signs of an acute cystitis or inflammation of the bladder exist, which were not present before the withdrawal of the large amount of urine. That is an important point to bear in mind in a case of retention from prostatic enlargement. These patients frequently complain of too free a discharge of urine; they pass water frequently, and therefore think they pass too much, and they come to you for that symptom. If you be not careful you may make a mistake, and suppose the neck of the bladder to be paralyzed, and that the water consequently comes away as fast as secreted. But remember, when such a patient comes to you, that lack of power to retain the urine, in consequence of paralysis of the neck of the bladder, is a very rare condition, whereas a frequent desire to pass the water after retention, up to a certain point has been reached from prostatic enlargement, is quite common.

We treat this case simply by withdrawing the urine—the only means of much service in such cases. Various plans have been tried for reducing the size of the hypertrophied prostate, such as the direct introduction of ergot by the hypodermic needle, or other instrument, and the internal administration of different medicines, but I have yet to see an account of much encouragement. Patients have been operated upon, but no results have yet been obtained which would warrant the procedure. We are safe in saying to this patient that his only hope is in palliation; to withdraw his urine with the catheter at least twice a day. It is better to teach the patient how to pass the catheter himself, as it is often inconvenient, if not impossible, for him to come to your office, and he can do it with safety by using the soft rubber catheter, "Nélaton's."

Serious accidents may take place if the urine be not withdrawn sufficiently often. I have already referred to incontinence of urine from over-distention. Again, retention may, by reflex influence upon the kidneys, prevent secretion of the urine. I cannot illustrate the importance of this question better than by speaking of a case which came under my observation four or five years ago. It occurred in a very prominent merchant of this city, and, by the way, he was, to his cost, no friend to doctors, and with very great reluctance would accept any assistance from them. He had hemorrhoids, and was urged, on several occasions, to have something done for them, but he declined, saying that he found it best to attend to such matters himself. He also had to micturate quite frequently. But that, he thought, was of no consequence. His sons were somewhat anxious about it, and advised him to seek assistance; but no, it was all right, he knew what to do, how to attend to such matters. He went away for a few weeks, with his son, fishing, at a distance of a few hundred miles from home. He was about to take a vessel for the salmon stream, when he became troubled with his hemorrhoids, and at the same time found some difficulty in making urine. The difficulty increased. He was urged strongly to see a physician, particularly because they were going several hundred miles from any possible medical aid. But the old gentleman was too stubborn; he knew better what was the matter with himself than anybody else, and refused to consult a physician. They started. Within a very short time he was unable to make water; retention continued and led to incontinence, of which I have spoken. They, of course, returned as soon as possible, but before any surgical aid could be obtained he passed into a moribund condition, and died. His symptoms were those of uræmic poisoning. It was evident that reflex action upon the kidneys had caused them to cease secreting the urine, which was retained in the system and caused his death. His body was brought to the city, and I was called in as one of the examiners at the post-mortem, to see if there was anything wrong with the genital apparatus, for since he had been passing urine, due, as before said, to over-distention, they thought death might have been due to trouble having its seat somewhere else. The man was sixty years old, healthy looking, as if his lease on life and health should be prolonged many years. The prostate was enlarged, and it was perfectly evident that the hemorrhoidal inflammation had caused swelling of the prostate, which, in turn, caused pressure upon the urethra, retention of urine and death. Had that man carried with him a little instrument like this (a catheter), and made use of it, he might be alive to-day. It is important, therefore, when a man at that age has to micturate frequently, to inquire thoroughly into his condition, and then teach him how to use a catheter, that his bladder may be completely emptied at least twice a day. In some cases, moreover, it is important to wash out the bladder. In the case of this patient, the urine is pretty clear; still, there is some "muddiness" about it, the result of a catarrhal condition caused by the irritation of the retained urine. Now, we must get rid of this, and the patient will then only have the trouble of withdrawing his urine morning and night, being really as healthy as anybody, and having a chance to live to a good old age. He tells me he desires to pass water during the night. If he will draw it off with the catheter on going to bed, it is probable he will sleep well till morning. It may become necessary to wash out the bladder with some warm water after drawing off the urine, a process which he will also have to be taught to do himself. The most convenient instrument for this purpose is a bag syringe, made of india rubber, having a nozzle to fit on to the catheter, and a stop cock at this point. It may contain from four to six ounces; four ounces is quite large enough for this purpose. Warm, clean water should be injected, and lest some foreign substance should be injected into the bladder, and do harm, the patient should carry a strainer with him, and always strain the water before inject-

ing. A man who has attained to sixty years of age cannot usually see well, and is in danger of injecting into the bladder an object of considerable size, which may be floating about in the water, and become a nucleus for stone. I presented a specimen of stone to the Pathological Society, last year, which had for its nucleus a piece of broomstraw, about half an inch long, which had entered the bladder with fluid with which it was being washed out. Sir Henry Thompson recommends, for washing out the bladder, a preparation of borax, glycerine, and water. I think he takes about one ounce each of borax and glycerine, and two of water, and makes a mixture; and of this he puts about one or two teaspoonfuls into four ounces of water, which gives a solution of borax not sufficiently concentrated to cause any irritation, but sufficiently concentrated to disinfect it, and relieve the catarrhal condition. It is one of the best kinds of medication for such cases that I know of.

This patient says he now feels pain, and that there is pain in the head of the penis when he urinates; that in certain sitting postures he has pain, more especially when sitting on a hollow-bottomed chair; not so much when sitting on a flat-bottomed chair. Perhaps the prostate is more directly pressed upon while sitting in a hollow-bottomed chair. Pain in the head of the penis, or along its extent, during urination, is a sign of stone in the bladder; yet an inflammation about the prostate will not infrequently cause pain in the head of the penis, simulating that symptom in stone very closely. It is possible, too, that this man has stone in the bladder. We would not be justified in exploring it thoroughly with the sound, having just withdrawn his urine, without injecting warm water. Even though we did not succeed in finding one, we could not say positively that stone did not exist. He should be examined in different postures, and, if necessary, at different times, for stone sometimes lodges in such a position within the bladder, or becomes so sacculated, that it may be impossible to discover it until by some means it becomes dislodged. We have no more time to devote to this subject to-day.

Stricture and Gleet.

Our next patient, gentlemen, tells us that he is forty years of age, and that he is troubled with a discharge from the penis, which has existed for twenty years. He had his first gonorrhœa as early as his eighteenth year, and has had it several times since. He has never been entirely free from the effects of the gonorrhœa; has always had a little "oozing." He has no difficulty in passing his water.

This history is at once suggestive of stricture. A persistent gleet, extending over a series of years, the discharge never having fully ceased after its commencement. With such a history we may at once take for granted that there is a mechanical obstruction to urination, to begin with; that there is a stricture, which is usually situated at the orifice of the urethra. Whenever a case of gonorrhœa does not get well promptly, say within six or eight weeks, you should look carefully for obstruction at the orifice.

This patient's penis measures three inches and three-quarters in circumference; the size of the urethral canal at the bulbous portion is represented by 40, and turning the instrument down to 38, which corresponds with the circumference of the penis, I gradually withdraw it, and find a contraction about two inches and a half from the orifice, of eight millimeters, the size here being represented by 30. Now, there is a little further back a natural contraction; that is, at the point where the penis is flexed, hanging down, there are some wrinkles in the urethra, and at that point a very slight contraction, a stricture, if you wish to so call it, very commonly exists, and perhaps is caused by some of the solid portions of the urine being held in those wrinkles, leading to a thickening of tissue. We, therefore, expect a slight narrowing at that point, but no such cause exists for narrowing at two and a half inches back, as in this case. It is altogether likely that this very considerable stricture, eight millimeters, is the cause of his gleet, and of its long continuance. There is also some contraction here at the orifice, at a point where contraction is likely to be a prominent source of irritation. These strictures should be divided, but as the patient is not prepared to have the operation done to-day, we shall have to postpone it to a future time.

I will now divide a stricture in a patient who was at our clinic last week. The stricture is situated about two and a half inches back of the orifice. Passing in the urethrotome, we turn it up so that the blade, on withdrawing it, will divide the stricture, which corresponds to 25, up to 35, the normal size of his urethra, as compared with the circumference of the penis, three and a half inches. You have seen this operation done before, and I will not, therefore, describe the instrument and its management to-day. Regarding the after care, none is required, except to guard against the possibility of hemorrhage, which, when the stricture is situated anterior to the bulbo-membranous junction, is not at all likely to occur after the first gush of blood. To be on the safe side, however, an attendant should remain with the patient forty-eight hours after the operation, so that in case any bleeding should occur, the patient may not become demoralized, but have a towel or something tied around the penis at once, and stop it. Should there be any difficulty in checking it, a smooth instrument may be passed down the urethra, and then tie a bandage around it. As said before, nearly all strictures occur anterior to the bulbo-membranous junction; but when you have to cut down to this, there is danger of troublesome hemorrhage, and it is best to operate externally, performing external urethrotomy instead of internal. I have not lost a patient from hemorrhage after the operation of urethrotomy, under any circumstances, but my experience in two or three cases, in which the deep urethra was divided, has taught me to be very careful; in one case the patient very nearly lost his life. To prevent too much smarting, which occurs during urination immediately after the operation, the urine may be drawn off at first with the catheter.

—The International Medical Congress has applied for more funds, and is charged with extravagance.

ST. LOUIS HOSPITAL, PARIS.

SERVICE OF M. FOURNIER.

Reported by M. J. Halloran, M.D., for the Medical and Surgical Reporter.

Malignant Syphilis.

In the spring of 1879, a young man, aged twenty-three, entered the service of M. Fournier. He had contracted syphilis when eighteen years of age; the initial chancre was followed by buccal ulcerations; shortly afterward ulcers appeared over the tibia, on the forehead, etc., which left deep and indelible cicatrices. A cicatrix just over the inferior maxillary bone is particularly noticeable. Eight months after the appearance of the initial chancre an ulceration appeared on the soft palate, which caused its complete destruction, the osseous portion alone being left intact. At present there exists a large opening between the buccal and nasal cavities, and the food, particularly the liquid portion, was at first rejected through the nostril, but he has become habituated to this condition, and can, at present, swallow liquids with great facility.

He entered the hospital with hydrarthrosis of the left knee; the articulation contains a considerable quantity of liquid, but there is no pain; this is the second time he has been thus affected; on the previous occasion he was cured by iodide of potash.

An antisyphilitic treatment, red iodide of mercury with iodide of potash was administered, and he improved gradually, being able soon to walk about; there remained, however, considerable hyperostosis of the articular ends of the bones forming the knee joint.

Chancre of the Tonsil.

This was a case of indurated chancre of the tonsil followed by engorgement of the cervical glands and secondary eruption on the skin. The primary chancre was evidently induced by simple cauterization with a stick of nitrate of silver which had been previously used on a chancre.

In a similar manner M. Blanchet, who had a large practice in Paris, communicated syphilis to twenty-seven persons, in passing a catheter into the Eustachian tube; among others a young girl of high connections, a pupil at Sacre Cœur, was infected and, together with other symptoms, suffered from necrosis of the bones of the nose, but recovered good health subsequently. Blanchet had the habit of simply placing the catheter in a tumbler of water after each catherization, without otherwise cleansing it.

Enormous Phagedenic Syphilide.

A woman thirty years of age entered the service; she had been exposed to infection one year previously, and latterly had been employed at very laborious work.

First there appeared a small pimple on the gluteal region, to which she paid no attention; it soon increased in dimensions, and ulceration supervening, it finally became very large.

There is at present, in the left gluteal region, a deep and inflamed ulceration, about six inches long by five in width, and more than an inch in depth in the centre, the subcutaneous cellular tissue being invaded. The surface of the ulceration is grayish, a species of soft eschar being formed; the odor exhaled resembles that from tissues in a state of gangrene, but the pain is not very marked; a few papulo-erosive syphilides were found at the vulva.

The treatment prescribed was very simple; the eschars were removed by poulticing; the sore was frequently washed with Labarraque's solution, after which iodoform in fine powder was applied over the surface; oxide of zinc in powder was dusted on the vulvar syphilides; internally, red iodide of mercury, in pill.

Amelioration was exceedingly rapid, and complete cicatrization of the ulcer obtained without change of treatment.

Muscular Atrophy, of Syphilitic Origin.

An individual entered the service for considerable atrophy of the muscles of the left arm; in a short time complete hemianæsthesia of the same side supervened, and finally he became paraplegic. There was also complete paralysis of the third pair of cranial nerves, which is very frequently of syphilitic origin.

As there were syphilitic antecedents, iodide of potash in large doses (six to eight grams per diem) was administered, and with the very best results, for the patient recovered the use of his limbs, and the muscles are gradually becoming reconstituted.

In commenting on this case, M. Fournier mentioned a similar one, which had occurred in his own private practice.

The patient, a lady of very respectable family, had contracted syphilis ten years previously, from her husband; the nature of her malady was carefully hidden from her, and no treatment instituted. The muscular atrophy commenced in one arm, and gradually and progressively became more marked; there was no pain, and all the muscles of the arm seemed affected, equally affected; the atrophy did not commence in any one muscle, or group of muscles, as in progressive muscular atrophy.

A vigorous anti-syphilitic treatment was instituted, with mercurial frictions, and with an entirely successful result; she was completely cured.

Medical Societies.

COLLEGE OF PHYSICIANS, PHILA.

At the regular meeting in June a paper was read by Dr. George Hamilton, on

Vivisection, with Reference to its Restriction by Legislative Action.

He began by observing that this subject is one that not only interests the profession, but has also engaged the attention of many of the more cultured and sympathizing minds in the community. Popular feeling, it is true, has not been so decided in this country as abroad, notably in England; and this may, perhaps, be explained by the fact that vivisection in the United States has hitherto been practiced only to a limited extent. If the importance of this subject may be estimated by the earnest, vehement language urged in defence of vivisection, or in rebuke and denunciation of it, then may it well be regarded

as entitled to no second place in questions pertaining to medical practice. But the subject is, intrinsically, a serious one, whether in reference to the human or the brute creation, and demands, for profitable consideration, that it be entered upon in a liberal, ingenuous and forbearing spirit.

The speaker disavowed any disposition to undervalue that which vivisection has accomplished to illustrate physiology; neither did he deny that, in certain affections, generally of the nervous system, great benefit has accrued to medical practice, originating directly or indirectly, it matters not, in the experiments of vivisectionists. But he called attention to certain drawbacks to its usefulness. The observer generally does not begin his operations until the animal is thrown into an unnatural condition, by the use of agents that destroy nerve power and sensibility to such an extent as to render it in a measure lifeless; or, if these agents are not employed, the animal is thrown into violent excitement and terror, from the torment inflicted by the knife, the chisel, the mallet, or the red hot iron of the operator.

A serious objection to accepting, as applicable to the human species, the results of experiments upon animals, is evident in the constitutional diversity and dissimilarity between them, the food of one animal proving poisonous and fatal to another. This obvious and important fact, that neither quibble nor logic can refute, is apt to be overlooked or disregarded in experiments. Very naturally, the investigations of the physiologist are directed almost exclusively to the functions of the brain, the spinal marrow, and the general nervous system; for here, in fact, resides the motive power of the entire organism, just as we see that the movements of the steam-engine are due to the furnace and boiler. Unfortunately for successful experiments upon animals, the nervous system is so exquisitely sensitive, and every portion, from the huge brain to the minutest ramification in the capillary system, so intimately connected and correlated, as to maintain a sympathy so universally perfect and surprising in its power, that we may well exclaim, "How fearfully and wonderfully are we made!" The vivisectionist then, *ab initio*, finds himself in difficulty; for violence to one organ will generally throw into commotion other portions of the organism, and this, in turn, may extend, so as to involve every part.

The mere want of success in attempts to reveal the mysteries of vital movement is in itself not ground for blame; the difficulty lies in the intractable character of these studies. Of this no one seems to have been more convinced than Bernard. He, in fact, candidly avowed that, in regard to secretion, the entire subject needed revision. This admission, by one so skillful, experienced, and renowned in vivisection, was of the utmost importance, for no one better than he knew the necessity for an infinite amount of knowledge, beyond what is now possessed, of vital organization and action, before the mysteries of nutrition, secretion and assimilation could be evolved from the darkness in which they had ever been shrouded, so that some ground of hope might with reason be entertained, that the long expected day of a rational therapeusis was about to dawn upon us, and gladden our vision with its life-inspiring beams. Other experimenters have, from time to time, admitted that vivisection had done more to advance physiology than it had ever contributed to improve general medical practice. The nature of a disease being once determined by vivisection, we are, it is sometimes said, in a position to attempt its cure. This is by no means certain; for all experience shows that some of the maladies which occur most frequently, and which afford the fullest opportunities for, and have repeatedly undergone, thorough examination, are among the most incurable and fatal; so that all that can be claimed in such cases is, that we are in better position to attempt their treatment.

Objections to vivisection have been made, in reference to its alleged immoral character. The sensibility and finer instincts of man, it is asserted, are endangered by frequently witnessing bloody and painful operations upon animals. That the tendency is in this direction, no argument is necessary to prove, for it finds its correlative in the case of vice; seen but once—hated; seen too often—embraced. Too much stress, however, may not be laid upon this charge, otherwise the surgeon, in particular, might be embarrassed or thwarted in his well-directed and merciful efforts for the relief of suffering, or for the reparation of injury. Nevertheless, man, as the lord of creation, is morally bound in regard to the animals under his control; for we are given to know, from Scripture, that the merciful shall obtain mercy, and that the merciful man is merciful to his beast.

The statement has recently been made, that vivisection is practiced perhaps more frequently in Pennsylvania than in any other part of the country. When we reflect upon the activity and energy of medical thought in the Northeastern and some of the Western States, it seems almost incredible that such indifference to this practice could exist, unless from incredulity as to its importance in medicine.

In concluding, the speaker said:—

From the general tenor of this paper, it might be thought that strict consistency with the sentiments therein expressed would scarcely justify an approval of vivisection, even when the normal physiological status of the animal had been destroyed previously to operation, or when its practice was by law restricted by the most rigid enactments; but that it should be unconditionally prohibited. The entire subject, however, is yet *sub judice;* and this, if no other reason existed, would warrant, for a time at least, something in the form of concession, both to the vivisector and to the public. The restrictions placed on vivisection by the Parliament of England are, so far as we have been informed, greatly approved by the more intelligent and thoughtful portion of the people. This action of the government had in its support, among many others, the following: Cardinal Manning, Prince Lucien Bonaparte, Alfred Tennyson, Robert Browning, James Anthony Froude, and John Ruskin; the head masters of Rugby, Harrow, and seven other large schools; twenty-one physicians and surgeons; and thirty-seven peers, bishops, and members of Parliament. These distinguished men, with many

others of similar sentiments, possessing as they did, in position and wealth, the means of enjoying life in an eminent degree, would have abstained from opposing the practice of vivisection, if they had believed that health and longevity would have thus been rendered more secure. Yet they felt that, under doubts in regard to a precise estimate of the value of vivisection to mankind, the voice of mercy cried aloud, from the horrors of Alfort and elsewhere: and the nobler instincts of humanity, and the precepts of Christianity, taught them not to disregard the doleful and imploring appeal. In our own country, New York, and, if I am rightly informed, several other States, have enacted stringent laws in regard to vivisection. In our own State, in which is the city of brotherly love—founded by Penn, in an observance of the principles of justice, peace, benevolence, love, and mercy, to a degree that the world has seldom witnessed—we are yet without this merciful enactment. Does it not seem eminently proper that the State of Pennsylvania, founded by that man whose humanity and practical Christianity will never disappear from the page of history, and whose figure will, ere long, crown the summit of his monument, the most magnificent of our country, should no longer delay the passage of an act in consonance with the benign and merciful character of its noble and illustrious founder!

After the reading of the preceding paper, Dr. J. C. Morris said:—

I regret that my late arrival has prevented my hearing the whole of Dr. Hamilton's interesting and important paper, and also regret finding myself obliged to enter a protest, feeble though it may be, against the acceptance of one of his statements. That vivisection necessarily tends to harden the feelings of those who practice or witness it, to render them callous to the sufferings of the poor victims, is contrary to my own experience. I shall never forget the expression which passed over the face of one of the most distinguished living physiologists and extensive vivisectors, as he remarked, "I am ashamed to look a rabbit in the face." My own experience as a young man was similar. And yet no one can question for a moment the advantage to be gained, even by the repetition before young men of the old and well-known experiments which reproduce before our eyes the sufferings due to various conditions of disease which we have to treat, thus giving to these young men the advantage of that experience which those of us who are older have gained as we have watched by our patients, on their journey to the bourne whence no traveler returns.

Besides, the same argument as to the witnessing of extensive and bloody operations rendering men callous to suffering, would apply with even more force to practitioners of surgery. Yet who has not seen the shrinking of older surgeons from such operations, which grows with their years and experience? And I need scarcely remind you, sir, of that distinguished surgeon, the late Dr. Physick, who, in his later years, had to be watched during the interval between an operation's being decided upon and the time fixed for its performance, to prevent his absenting himself from the city.

No, sir, the thing which impels the vivisector, as that which impels the surgeon, is the desire to be able better to relieve human suffering. Let us be careful how we discourage either.

Editorial Department.

Periscope.

Effects of Syphilis on Herpetic Patients.

The March number of the *Journal des Sci. Med.* states that M. Révillet (of Lyons) has devoted his thesis to studying the effects of syphilis on herpetic subjects, this question being as yet unsettled, notwithstanding the attention it has received. The author first studies those cases in which syphilis shows itself upon patients already affected with herpes, and his observations establish the following fact: The cutaneous affection receives no impetus at the time the secondary symptoms show themselves; on the contrary, it has a tendency to spontaneously disappear, or else it loses its peculiar characteristics, and is transformed into a syphilide; through a series of successive modifications, the place occupied by the herpetic psoriasis, is now invaded by a real papulous syphilide, in which the traces alone recall the pre-existent psoriasis; but this transformation is anything but final; herpes, the pre-existent cutaneous affection, soon again reappears, with the same characteristics it possessed prior to the syphilitic invasion. This last fact proves how defective was the method recommended by those who, with Anzias-Turenne and Gibert, tried to syphilize patients for the purpose of modifying or curing chronic affections of the skin, especially as when herpes is present syphilis finds a favorable ground for the development of its most serious forms.

Another series of observations mentioned by M. Révillet, shows that a syphilide may be changed, *in situ*, into a psoriasis; this transformation first occurs in the localities most generally visited by the psoriasis, that is, on the posterior face of the elbows and the anterior face of the knees and thighs; these lesions actually belong to the real psoriasis, and there is nothing about them of a syphilitic appearance. We must, therefore, admit that in those cases herpes has been aroused by syphilis; but this awakening of the herpetic diathesis may also take place at a much later period, and it would appear from statistics that syphilis either acts hastily or slowly in causing the appearance of a psoriasis of an herpetic nature. This fact, moreover, corresponds with the opinion of several authors. M. Révillet recalls that Bazin, and Ricord have said

that: syphilis awakens herpes, and M. G. de Mussy, observes that, "pox is a dunghill which favors the ripening of every diathesic germ." Finally, all these facts seem to warrant the conclusion that in herpetic patients syphilis meets with favorable conditions for its most serious manifestations and rapid development, and the exhibition of tertiary symptoms; syphilis is then indeed serious—not only because of the lesions to which it gives rise in the external integuments, but because of the changes it causes in the bones, and parenchymæ, and which constitute the disease when it has reached its third period.

The Proper Treatment of Inebriates.

In a lecture reported in the *Medical Press and Circular*, June 8th, Mr. Stephen S. Alford, F.R.C.S., gives the following directions on this subject:—

As soon as an inebriate is received into such a home, and until the alcoholic effects have passed off, he should be kept in bed, under medical treatment. All alcoholic drinks should be at once withheld; no harm will result from this total and sudden suspension of stimulants, not even in delirium tremens. The letting-down system, by gradually discontinuing alcohol, is unwise, as it feeds the craving, and hinders the recovery. The morbid craving will soon abate, but to relieve the intolerable sinking and nervous prostration, acidulated drinks, barley water, buttermilk, and such like diluents should be freely given for a few days; even if sickness occurs, these drinks should be persevered with, for the sickness helps to cleanse the stomach. These drinks also act freely on the skin and kidneys, and thus have a beneficial effect on the secretions. Russian vapor baths, if they can be obtained, will promote this, and tend to soothe and allay the distressing restlessness, and to divert and occupy the attention. After a few days a little light food can be given, such as toast, with beef tea, or some farinaceous preparation, but butcher's meat should, for a time, be avoided.

It would, perhaps, be better for confirmed inebriates, at all times, to take butchers' meat moderately, since it taxes the stomach, and creates a sinking feeling. Liebig considers that vegetarians, from chemical and physiological causes, would necessarily dislike and avoid alcohol.

During the early stage of treatment, if accompanied by wakefulness and delusions, bromide of potassium, in large doses, with capsicum, frequently repeated, has a beneficial effect. The bromide soothes the agitated nervous system, and the capsicum allays the gastric craving. The ordinary anodynes, especially chloral hydrate, should be avoided. As soon as the alcoholic contamination has passed off, which it will require fully three or four weeks to effect, exercise and light occupation will be beneficial, and then the general moral treatment must be brought to bear. Harshness will cause sullenness and obstinacy, and, therefore, kindness and sympathy must be shown, and an effort made to arouse the better feelings, create a desire for recovery, and inspire a confidence that they can be restored if they will exert themselves, and second the efforts made on their behalf. The better part of the man being thus aroused, the alcoholic contamination eradicated, and the nervous system rallied, the influence of restored inmates, with whom they should now be allowed to associate, will be useful, helping to confirm a determination to throw off the old habits. Under judicious management and religious influence this improved condition may become permanent; in most cases nine or twelve months—in confirmed cases even some years—may be required to strengthen and confirm these habits. By degrees full liberty can be allowed the patients to go about as they like, at first only in company with a tried inmate, but on parole as regards alcoholic drinks. The habit of self-denial under temptation is thus practiced, and becomes confirmed; and so valuable lives may be restored to their families and to society. Such I believe to be the most successful plan for the treatment of the inebriate.

To carry this out, it is absolutely necessary to have sufficient power of restraint during a paroxysm, as well as from the first, so as to put the inebriate under control, voluntarily or otherwise. No one will be more thankful afterward for this suspension of their mad career.

During convalescence red cinchona bark strengthens and sustains nerve power; but when attacks of exhaustion and sinking arise, caffeine or cocoa will afford temporary relief; various nerve tonics, as quinine, arsenic and strychnine, may also be given with benefit. The preparations of iron are not adapted for these cases except where there is anæmia. To prevent relapses, a life-long abstinence from alcohol is absolutely necessary.

The Removal of Nasal Polypi.

At the conclusion of a report of various cases in illustration, Mr. Henry Morris remarks, in the London *Medical Times and Gazette*:—

Naso-pharyngeal growths can be removed by one or other of six different methods, viz: 1. Simply by the nasal forceps used through the anterior nares. 2. By the wire écraseur used through the nose, even when the tumor is too large to be drawn out through the nostril in the noose of the instrument. 3. By seizing the polypus at the back of the palate and twisting it off with a pair of tongue-forceps, or with the fingers and thumb in the mouth. 4. After slitting up the lip and the ala of the nose and enlarging the anterior aperture of the nostril by clipping away the margin of the nasal process of the superior maxilla. 5. By the method employed by Syme in 1841, and by Flaubert and Professor Mott in 1842, of laying open the nose by an incision from the angle of the orbit, round the wing of the nose, and through the mid-line of the lip, and then dividing the suture between the nasal bone and the nasal process of the superior maxilla, and turning the nasal bone, with the integuments covering it, toward the median line. 6. By excision of the whole or great part of the upper jaw. It is impossible and would be unwise to advance arguments in

favor of this or that operation in preference to the others; but I believe, by one of the above methods, all cases of naso-pharyngeal polypi can be dealt with more efficiently than by having recourse to the practice of the permanent ligature, or of dividing the soft palate, or of splitting the nose along one side of the median line. All these three measures have had their advocates; yet the permanent ligature is fraught with the danger of setting up blood-poisoning, besides being a source of prolonged inconvenience and even disgust to the patient; and division of the soft palate, or of the nose along its median line, has the great disadvantage of failing in its chief object, viz: in affording sufficient increase of room to be of the least advantage, and in this respect, if we may compare small things with great, it is about on a par with the Sigaultean operation as a substitute for craniotomy or Cæsarean section. These measures excepted, it will be well, in naso-pharyngeal polypi, as in operations on the tongue, to vary the plan of procedure to suit the conditions and necessities of each case, and not to adopt any particular method as being the best for all cases. The operation which promises to allow of the most complete removal, but which at the same time, least interferes with the surrounding normal parts, is the one which should be selected. Just as in cases of cancer of the tongue, the mode of operating ought to be decided upon *only* after regarding the extent of the disease, together with the size of the aperture of the mouth, and the space afforded by the size or absence of the biscuspid and molar teeth. To do too much because of some prejudice in favor of a given operation is unjustifiable; to do too little for the same or other reasons, is to sacrifice the interest of the patient.

Treatment of Vomiting in Phthisical Patients.

M. Ferrand, physician to the Hospital Lænnec, sums up as follows, in *L'Union Médicale*, quoted in the London *Medical Record*, the principal indications presented in the vomiting of consumptive patients. The forms of vomiting are:— 1. The mechanical vomiting resulting from the excitation of the respiratory nerves, which is sometimes combined with a certain degree of pharyngeal or gastric irritation. 2. Gastric vomiting, properly so-called; central and bulbar vomiting. These varieties of vomiting differ, not only in their mechanism, but also in their period of appearance, and in the nature of the vomited matters, etc. The mechanical vomiting of phthisical persons, which may be called direct vomiting, occurs at the outset of the disease. It brings up substances which are in a large measure alimentary. The first indication in this case is to calm the cough. This, however, is more easily said than done. Emollients, alkaline and soothing gargles should be employed. When the irritation of the pharynx is deep-seated, modifying astringents (alum, tannin, confection of roses, etc.) should be resorted to, and even such remedies as tincture of iodine, nitrate of silver, or ammonia. What are most often employed are the narcotics, the fumes of belladonna, datura, and then anæsthetics and antispasmodics. In this contingency, M. Woillez, recommends touching the pharynx with a solution containing one-sixth of bromide of potassium. Gastric vomiting is the most common of digestive disorders in phthisis. It occurs in three-fifths of patients, according to Andral, and in four-fifths, according to Louis. It is the vomiting of the middle period of the disease. The matters are not purely alimentary; they are substances more or less changed by the digestion and fluid. They include also mucus and bile. There are four varieties of gastric vomiting. 1. Vomiting from apepsia. For this, bitter and tonic digestives are to be employed, or, in case of need, an emetic; in default of the latter, chloral, and chloroform in preference to ether; and diastase, because of its peptic qualities, may render real service in these cases. 2. Vomiting from "hypercrinia," observed especially in cachectic patients, is combated by absorbents (magnesia, charcoal), or astringent powders (rhatany, calumba). Powdered opium renders great service in these conditions. 3. The vomiting from convulsive gastralgia demands the administration of narcotics (opium, chloral, ether). The application of ether spray to the epigastric region and the back has given good results. 4. Vomiting by gastric irritation. Here the diet must be regulated, the meals must be given at fixed times, and milk-diet prescribed. Alkaline remedies and iodide of potassium in small doses should be given. Opiate blisters should be applied, and, in case of failure, revulsive agents (tincture of iodine and blisters) should be used without fear. Central or bulbar vomiting may occur at the outset of the tuberculosis, but usually at an advanced stage. It may be symptomatic of an encephalic irritation, or the effect of bulbar anæmia. The vomited matters consist mostly of mucus and bile. The therapeutic agents at the disposal of the physician are first chloral, then chloroform, opium, and morphia, as well as bromide of potassium, in doses of one to two grams (fifteen to thirty grains) at meal times.

Reviews and Book Notices.

BOOK NOTICES.

Supplement to Ziemssen's Cyclopædia of the Practice of Medicine. Edited by George L. Peabody, M.D., Instructor in Pathology and Practice of Medicine, College of Physicians and Surgeons, New York, etc., etc. New York: William Wood and Company; 27 Great Jones street. 1881. Sheep, 8vo. pp. 844.

This volume comprises a series of brief articles, chiefly abstracts from recent contributions to medical literature, so arranged as to show the progress made in the various departments of medicine since the publication of the several volumes of this valuable work, some of which are now five or six years old. These articles, sixty in number, will be found to be of value, not only to those who possess the Cyclopædia, but as an independent work, showing the most recent

advances in medical science. Some of the subjects treated of in the Cyclopædia have been left out in this volume, as nothing of importance has since appeared in regard to them—most of the fevers, especially those that are contagious, are well represented. Under yellow fever we find a brief history of the several epidemics which have appeared in this country since 1873, with additional remarks on the prophylaxis, clinical history, pathology and treatment. In this connection, it is quite curious to notice that the epidemic of so-called "Typho Malarial Fever," which broke out in Baltimore, about the middle of September, 1876, attacking forty-four persons, of whom forty died, has been here classed as yellow fever. The chapter on syphilis is full of interesting matter, though there is nothing new in the way of treatment, the tayuya, as well as iodoform internally, having failed to give satisfaction, and the relief obtained at the various thermal springs in this country and Europe being entirely the result of vigorous medication by resident physicians at the springs. For want of space, we are unable to give this volume the full attention it merits. Suffice it to say, that the contributors are all men of well known ability, and seem to have spared no labor to render the work what it purports to be.

American Nervousness. Its Causes and Consequences. A Supplement to Nervous Exhaustion (Neurasthenia). By George M. Beard, A.M., M.D., Fellow of the New York Academy of Medicine, Member of the New York Neurological Society, and of the American Neurological Association, etc., etc. New York, G. P. Putnam's Sons, 27 and 29 West 23d street, 1881. Cloth. 12mo, pp. 352.

As chief among the causes of the rapid increase of nervousness, a modern disease of American birth, the author places modern civilization with its distinguishing characteristics, steam power, the periodical press, the telegraph, the sciences, and the mental activity of women, to which is added the influence of our excessively dry and changeable climate, of our civil and political, religious and social institutions, together with our personal habits and indulgence of appetites and passions, all of which combined tend to produce a rapid development and acceptance of new ideas, increase in amount of business and worry, necessity of punctuality, financial trouble, and innumerable anxieties of which our forefathers knew nothing. Nervousness, or nervelessness, as it might with propriety be called, is particularly a disease of brain workers, and its subjects may be recognized by a fine organization, distinguished from a coarse by fine, soft hair, delicate skin, nicely chiseled features, small bones, tapering extremities, and frequently by a muscular system comparatively small and feeble, associated with a superior intellect and a strong and active emotional nature. They have an increased capacity both for enjoyment and sorrow, are extremely sensitive to heat and cold, and subject to functional nervous disorders, but rather exempt from organic diseases of the nervous system and from inflammatory diseases. Nervousness does not, however, appear to be such a great evil, for it carries its own antidote with it, and the greatest average longevity is found among the classes where nervousness prevails, the injurious effects of the same being more than counterbalanced by their superior hygienic surroundings. It is in this way that we must try to explain an apparent contradiction found in the book, the author asserting in one place that nervousness is an American disease of modern origin and found chiefly among the brain-working classes, that it is rapidly increasing, and that one of its effects is a diminution in bodily weight; in proof of which he states that a thousand Americans taken at random weigh less than a thousand Englishmen or Germans of the same ages and social status; while in another part of the book he makes the statement that "we weigh more than our fathers," that "the women in all our great centres of population are yearly becoming more plump and more beautiful," that "in the leading brain-working occupations our men are acquiring robustness, amplitude and quantity of being," and that "a thousand girls and boys, a thousand men in the prime of years, taken by accident in any of our large cities, are heavier and more substantial than were the same number of the same age, and walk of life twenty-five years ago;" in short that during the very same period that the bodily weight-reducing nervousness, has been increasing, we have grown heavier. The physical future of the American nation he pictures as gradually approaching to perfection, though this has to be preceded by a period of marked increase in neurotic diseases, including inebriety. His remarks on education are especially worthy of careful study. In conclusion, we wish to say that we regard this work as far superior to any of the previous literary productions of the author, and, being written in a popular style, it should be read alike by the medical profession and the clergy, by parents and teachers, and by our women, who, in the author will find a warm admirer, several pages of the book being devoted to the "phenomenal" beauty of American women.

THE

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THE PURIFICATION OF POLLUTED RIVER WATER.

A question of vast importance to public health is that in reference to the *modus operandi* of the purification of river water after sewage in considerable quantities and other decomposing organic substances have been thrown therein. Dr. TIDY, a well known English sanitary authority, teaches that this purification is effected *per se* by oxidation of the organic substances in the act of flowing through and amidst a large volume of water. He has shown that in some English rivers, the Wear, for example, the water is as pure some ten or fifteen miles below a city of 100,000 inhabitants, all of whose sewage it had received, as it is above the town.

Dr. FRANKLAND, also an eminent authority, disputes this view in a recent number of the *Journal of the Chemical Society*. He states that the great purifying agent is *iron*, and that a stream bearing in solution ferruginous compounds is the most effective disinfectant and antiseptic known in order to restore to purity the waters of contaminated rivers. Both his instances and the chemical reasoning he brings forward to support this view appear convincing, though it is certain that oxidation also plays a part in the system of natural purification.

The effect on impure water of a large number of the disinfectants ordinarily sold has been studied by Dr. TRIPE, who reported the results to the Society of Medical Officers of Health, last winter (*Medical Times and Gazette*, Dec. 4).

The results of the experiments by heat are important, as they show that the vibrios, bacilli, and, at any rate, some other bacteria of sewage, are killed by a temperature of 140° Fahr., while former experiments have shown that vaccine lymph has been rendered sterile after being exposed for two hours to a temperature of 150° Fahr., or for half an hour to a temperature of 170° Fahr., but that until these temperatures were reached and maintained for the periods mentioned the lymph still remained active. It is, therefore, probable that these bacteria, with perhaps one exception, are more influenced by heat than the infective particles of vaccine. The infusoria became more lively as the sewage warmed, but immediately the temperature exceeded 90° Fahr. their movements became slower, and at 110° all had died. At 120° Fahr. many of the bacilli, vibrios, and spirilla were motionless, and at 125° all these had ceased to move except a few spirilla.

Impure carbolic acid and preparations of zinc chloride were the most efficient in destroying the lower forms of life. It seems to be the case that the impure carbolic acid has a much greater germicide action than absolute phenol, a fact that, we believe, has not escaped the notice of some surgeons.

Unfortunately, none of the agents suggested could be employed in purifying sewage which flows into water destined for potable uses. At least, no practical method was suggested for this purpose. The matter is one of such widespread importance that its study has become indispensable to the protection of the health of large districts in and near cities.

A suggestion in this connection has been made

by Professor W. H. Brewer, of New Haven, in reference to the action of muddy water, containing clay, on sewage. He believes that muddy water and water containing sewage act in a mutually purifying manner upon each other. We find that the purer the water the longer it takes the last portion of suspended matter to fall to the bottom. This may be due to the saline mineral substances dissolved in the sewage, which hasten the precipitation of the suspended matter. Hence, sewage discharged into a river of muddy water would be more rapidly purified of its putrescible materials, namely, the albuminoids, than if it were discharged into a river of clearer water.

This would not necessarily extend to the removal of the specific germs of certain diseases, which we know can exist in water of great transparency, but of the dissolved and very finely suspended matter which gives rise to foul smells, and which, in chemical analysis, are taken as the measure of sanitary impurity.

The unpleasant odors which sometimes occur in city waters distributed from reservoirs, and which largely arise from the decay of aquatic vegetation, he has known several times to suddenly diminish, or entirely disappear, with the *roiling* of the water by a heavy rain; and other persons have made similar observations.

IS GONORRHŒAL INFLAMMATION OF A SPECIFIC NATURE?

This is a question on which sometimes the reputation of individuals and the happiness of families depend, and the possibility of its decision should be closely scanned. In the face of the positive assertions of some writers (Tait, Simmons), it is worth while to quote the opposite opinion of that eminent authority, Prof. J. Matthews Duncan, as expressed in one of his lectures:—

I have mentioned many forms of vaginitis, and one important practical subject I must discuss briefly in connection with the forms of this disease. Is it, in any special case, venereal or not venereal? You will, in practice, often be asked this question, and I advise you never to answer it explicitly. You cannot decide absolutely whether a case is venereal or not. At one time it was supposed that the discovery of trichomonads, or a leptothrix, or a vibrio, would decide whether it was venereal or not. But this is now given up. I have seen gonorrhœa which was certainly not venereal bear every character of the ordinary venereal disease. I do not say that there is no distinction, but only that the distinction cannot be made out by the practitioner so as to justify him, from his own inquiries into a case, in giving a decided opinion on the subject. Meantime, the distinctions of venereal gonorrhœa are simply marks of severity. It has been said that venereal gonorrhœa is infectious, while simple gonorrhœa is not; but I have seen every character that can be predicated of the one occur in the other, as I said before, including infection.

It is clear from this that the utmost caution ought to be used in pronouncing any case of vaginitis as of specific origin. In fact, is it not safer to go further than Prof. Duncan appears willing to advance, and to say at once that *there is no distinction* between gonorrhœal and ordinary vaginitis?

Such is the position taken by a London surgeon of vast experience, Mr. Lane, who for twenty-five years has been connected with the London Lock Hospital. In some testimony he recently gave before a Parliamentary Commission, he stated that, as the result of this exceptionally wide observation, he did not believe in the specific nature of gonorrhœa; the discharge was a result of the inflammation of a mucous membrane; and his view, like that of most of the French authorities, was, that both gonorrhœa and leucorrhœa were essentially the same; they were affections of the same mucous membrane, and both were communicable according to their character, whether they arose from impure intercourse or not. If they were purulent or yellow, they would excite a similar discharge in another person; but if transparent or only slightly milky in appearance, they would probably be innocuous. Vaginal discharges in prostitutes were, in this sense, more contagious, from the continual irritation to which their genital organs were subjected. In the male, a discharge, undistinguishable from gonorrhœa, might arise from the use of cantharides, the passage of a stone or of gravel along the urethra, or the use of a catheter; and this was also liable to give rise to the same sequelæ—such as swelled testicle, and even gonorrhœal rheumatism.

Dr. KEYES, in his late work on *Venereal Diseases*, while not going the full length of these opinions, evidently inclines strongly to doubt the specific nature of the gonorrhœal infection, and adduces many causes which can produce it, apart from contagious intercourse. Those who remember RICORD'S teachings will recall his short and easy recipe for acquiring gonorrhœa without exposure to one having specific or any other disease.

It would seem from these statements that the idea of the specific nature of gonorrhœal inflammation is so far from being demonstrated, that it is better to hold it as doubtful, and when an opinion is called for, to express the view that such specificity does not exist.

NOTES AND COMMENTS.

Therapeutic Notes.

TREATMENT OF CONSUMPTION.

In the *Medical Press and Circular*, June 8th, Dr. William H. Pearse says he is continually prescribing a combined muriatic acid, quinine, and arsenic treatment to a large number of those who are of the phthisical type, but whose cases have not advanced beyond the indigestion or bodily debility stages, and, with rare exceptions, with marked benefit. His general directions to such a patient are an out-of-door life, all and any food to which his fancies incline him, and which include onions and pickles; also cod-liver oil, and the following mixture three times a day, after meals:—

℞.	Cinchonid. sulph.,		gr. xx
	Acid muriat. dil.,		ʒ v
	Liq. arsen. hydro.,		♏c
	Aq. maris.,		♏lxxx
	Mangan. sulph.,		gr. xx
	Infus. quassiæ,	ad	ʒ x.

Twenty doses.

The improvement is steady and regular, though, of course, rather slow.

TARTARIC ACID IN DIPHTHERIA.

Prof. Vidal, of Paris, employs the following in diphtheria, and claims for it an almost specific action:—

℞.	Tartaric acid,	ʒ ijss	
	Glycerine,	ʒ ss	
	Peppermint water,	ʒ vij.	M.

A brush dipped in this solution is made to touch, every three hours, the diphtheritic patches, which soon reduces them to a pulpy liquid mass, which is afterwards easily removed. In the interval of the applications of the tartaric acid the false membranes are touched with citron juice.

HYDROCHLORIC ACID IN CHLOROSIS.

Dr. Zander states, in *Virchow's Archiv*, that he has treated many cases of chlorosis with hydrochloric acid, with the best results. He claims that there is iron enough in the food, but that its absorption is deficient, owing to the want of hydrochloric acid in the gastric juice, by means of which iron is dissolved and made capable of being absorbed.

CHRONIC URTICARIA.

According to M. Labbé, *le Progrès Médical*, June 4th, in the treatment of this affection arseniate of soda must be administered in pretty large doses, five milligrams to one centigram per diem. At the same time lotions containing corrosive sublimate, such as the following:—

℞.	Hydrarg. bichlorid.,	gr. xv	
	Aq. destill.,	ʒ iij	ʒ ij 100 grams
	Alcohol,	q. s.	M.

For adults, a teaspoonful of this solution should be added to half a tumbler of fresh water, and this should be used to bathe the affected parts when there is considerable irritation. After fifteen days of treatment there is almost complete cure. Again, at each meal the patient should take a teaspoonful of the following solution:—

℞.	Sodii arseniat.,	5 centigrams
	Aquæ destill.,	100 or 150 grams. M.

In conjunction with this treatment, alkaline baths and alkaline drinks should be taken, and prolonged bathing, after Hebra's method, may be tried. The parts affected may be dusted with a powder composed of oxide of zinc and starch.

The Proper Way to Give Aconite.

In the London *Medical Record*, Dr. William Murrell makes some judicious observations on the correct plan for administering aconite so as to secure its most advantageous action. He observes that aconite does act best in small doses frequently repeated. Many practitioners get no good from aconite, because they do not know how to use it. The dose of the tincture recommended in the *British Pharmacopœia*—from 5 to 15 minims—is absurdly large, and no one with any respect for his patient's safety or his own reputation would ever think of giving it. The best way is to put half a drachm of the tincture in a four-ounce bottle of water, and to tell the patient to take a teaspoonful of this every ten minutes for the first hour, and after this hourly for some hours. Even smaller doses may be given in the case of children. The great indication for the use of aconite is ele-

vation of temperature; the clinical thermometer and aconite bottle should go hand in-hand. If properly used, aconite is one of the most valuable and indispensable drugs in the *Pharmacopœia*.

Treatment of Acute Eczema.

M. Fournier employs the following treatment during the period of desquamation after all inflammatory congestion of the skin has disappeared. When desquamation continues indefinitely the ointments which would be detestable during the inflammatory period are of great service, if not of too exciting a nature. Those most usually employed are the following:—

℞.	Benzoin,	2 grams	
	Zinci oxid,	2 grams	
	Ung. simplicis,	20 grams.	M.

Or, the glycerite with tartaric acid, much employed by M. Vidal:—

℞.	Ac. tartaric.,	1 gram	
	Glycerite amyli,	20 grams.	M.

If these do not succeed recourse may be had to others which are slightly irritant, containing small proportions of tar—

℞.	Picis (tar),	2 grams	
	Glycerit. amyli,	30 grams.	M.

Or, containing oil of cade:—

℞.	Ol. cadini,	2 to 4 grams	
	Ol. amygdal. dulc.,	30 grams.	M.

In conjunction with this, the parts affected should be bathed with slightly astringent lotions. As, for instance, the following:—

℞.	Sodæ borat.,	30 grams	
	Glycerinæ,	60 grams	
	Aquæ,	300 grams.	M.

Two or three lotions per diem; the parts being then dusted with starch.

Management of Chloroform Narcosis.

A Paris correspondent of an English contemporary relates the following incident:—

I was invited by Dr. Labbé to assist in a case of ovariotomy at a private hospital. The patient was given chloroform. When the anæsthesia was complete, the surgeon made his incision in the linea alba, through the skin and circular tissue. Suddenly the respiration stopped, and the heart ceased to beat, as clearly shown by the cessation of bleeding and the bloodless appearance of the lips of the wound. The mouth was cleansed from mucus, the tongue drawn forward, the patient's head thrown well back, and artificial respiration was practiced for quite ten minutes, but without result. The case appeared desperate, when Dr. Labbé put a large cloth in boiling water and applied it to the cardiac region. Instantly the heart commenced to beat and the patient to respire. She was saved. The operation was not terminated. The cloth which had been applied was of such a heat that a large blister was raised at the seat of its application.

Sterility in Males.

In a recent séance of the Société de Biologie (May 14th), M. Sinety said that sterility in families was generally considered to be the fault of the wife; while, if a careful observation was carried out, it would often be found that the husband alone was to blame. Microscopical examination often shows the absence of spermatozoa, and their presence does not always demonstrate the fecundity of the individual.

M. Sinety practiced, on several occasions, artificial fecundation, without success, and subsequent examination of the sperm demonstrated that the spermatozoids, very shortly after emission, were deprived of movement.

He has observed four cases where he considered the sterility due entirely to this want of activity of the spermatozoids, which had not sufficient vigor to reach the external third of the Fallopian tube.

All the individuals were young, but two were phthisical, and the two others of feeble constitution.

Ethereal Castor Oil.

M. Prodam, a pharmacien of Fiume (Austria), has obtained from the castor seeds, by treating them with ether, not only the oil, which would not be purgative by itself, unless it contained some of the active principle known as *ricinine*, but his solution also contains this principle in larger proportion. He is thus able to get the purgative effect of the oil by a smaller dose, and without the disagreeable taste of the ordinary oil. His preparation has further the advantage of being miscible, in any proportion, with water, coffee, or milk.

Simple Remedy for Chafe.

Dr. Powell, of La., sends us the following:—

Bathe parts well in tepid water, dry well with soft cloths, and apply, by means of a soft sponge or cloth, the following:—

℞.	Zinci acetatis,		grs. xv	
	Morphiæ acetatis,		grs. ij	
	Glycerin,			
	Aq. rosæ,	āā	℥ ij.	M.

Ft. sol.

Sig.—Apply to chafed parts twice or thrice a day.

I have found after a day's use of the preparation it gave great relief. The solution should be diluted according to age. The above is especially applicable to chafe on the inner part of the thighs of *fleshy* persons and infants, who are more or less subject to the disorder.

Special Reports.

NO. XIII.—NEW MECHANICAL AIDS TO DIAGNOSIS.

It is a truism to say that the scientific treatment of disease rests primarily on recognizing what disease we have to treat. Hence the all importance of Diagnosis. Every aid to our senses, every instrument of accuracy which can be applied to the measurement of symptoms, is a gain toward therapeutics. Of late the additions to our means of diagnosis are numerous, and even wonderful. They all deserve close attention. We may begin with

The Ophthalmoscope in General Practice.

Its value, in general, for the detection of cerebral and other disease is now universally acknowledged. An instance in point, and not an unusual one, is given by Dr. F. J. B. Quinlan, of St. Vincent's Hospital, Dublin, in a recent address. He says (*Med. Press and Circular*):—

During the present month you have seen a striking example in the case of a tall, athletic sergeant of police who was admitted for neuralgic pains in the head. An ophthalmoscopic examination, in search of some possible cerebral derangement, revealed not this, but the now well-known retinal appearance of albuminuria, a malady of which he did not exhibit the slightest ordinary appearance, or of which we had not the least suspicion. A chemical examination of the renal secretion proved that the formidable malady described by Dr. Bright was present; but, taken in time, it yielded to treatment. A few years ago it could not have been detected, unless by accident, until it had reached a stage where it would have clearly displayed itself, and where recovery would have been difficult, if not impossible.

Other instances, in considerable number, have been reported in various journals: The visible pulsation of the retinal arteries in the aortic valve disease, of Corrigan, and other forms of heart disease, are capable of similar detection; so, also, is inherited contagious disease, purpura, and the early stages of locomotor ataxia. In fact, the ophthalmoscope places under our view a process of living brain and transparent blood vessels with the blood going on; and, without its aid accurate diagnosis of brain disease is hardly possible. The use of the instrument in general medicine is a recent idea now being worked out, and ere long will yield results of great importance.

The veteran Professor, E. Bouchat, in the *Paris Medical*, 5 Jan., *et suite*, gave an able review of medical ophthalmoscopy and "cerebroscopy." He lays down four pathological laws, which may be briefly summed up to mean that all cerebral, cerebro-spinal, spinal, and diathetic maladies determine certain phenomena of the circulation, and special lesions, which are recognizable by the ophthalmoscope. In the last mentioned class are included syphilis, tuberculosis, leukemia, albuminuria, and glycosuria; they produce neuro-retinitis and diathetic choroiditis. He gives full details of cases in which such obscure lesions as cerebral tumors, spinal sclerosis, chronic hydrocephalus, tubercles of the choroid, etc., have been accurately diagnosed during life.

The most recent monograph on the subject of ophthalmoscopy is "A Manual of Ophthalmoscopy for the Use of Students." By Dr. Dagueret. Translated by C. S. Jeaffreson, F.R.C.S. London: Churchill, 1880.

The Binaural Stethoscope.

The sounds of the lungs and heart are unquestionably rendered much more distinct by having them conveyed to both ears simultaneously, than to one only. It is not easy to explain the general use of one ear, except that it is through indolence. Of late binaural stethoscopes have justly come into favor among accurate diagnosticians. One of the best of these is that devised by Mr. William Snowden, of this city, which has already been described in this journal. The inventor claims that the sounds are transmitted with equal clearness to each ear; that as the rubber conducting tubes are free from woollen or silk coverings, friction sounds from this source are avoided; the ear pieces of soft rubber exclude extraneous sounds, and it is readily adaptable to all positions, both of the patient and the physician.

The acoustic principles are carefully observed in its construction, and as it has been in use now for a year or more, it may be said to have proved its utility. Certainly, those who accustom themselves to a good binaural stethoscope will not return to those adapted for the single ear only.

The Chromatroscope.

A paper by M. de Grandimont, on an experimental process for determining the sensibility of the retina to colored luminous impressions, was read on May 23d, before the Academy of Sciences, Paris. The instrument employed is called a chromatroscope. The observer looks steadily at the central point of a disk having apertures. At a little distance from the other end of the disk colored surfaces are placed. Gradually the sensation of color is lost. If, then, white surfaces are quickly substituted for the colored ones, the complementary colors come out with great brightness and purity.

The Spectroscope.

There is no doubt but that one of the important coming aids to medical investigation is the process of spectrum analysis, which has accomplished such marvels in solar and stellar chemistry, but which has up to the present been resorted to in physiological more than in medical research. Its medical application has lately received an impulse by the publication of "*The Spectroscope in Medicine.*" by Dr. CHARLES ALEXANDER MACMUNN, of Wolverhampton, England. This volume gives a clear account of the theory and practice of spectrum analysis; it describes what has already been effected for physiology and medicine, and indicates the still greater *rôle* which this instrument is destined to fulfill. To use the concluding words of the author, "There is no doubt that when the spectroscope comes to be used more extensively than it has been hitherto, a great number of pathological absorption spectra will be discovered; and it remains for those who have abundant clinical opportunities to do their share," a remark which derives great force from the striking results obtainable from the spectroscopic examination of pathological fluids with the aid of proper chemical reagents. The spectroscope has been used in various hospitals, and about two years ago an excellent method of detecting the presence of bile by its means was discovered. This test is equal in accuracy and delicacy, and superior in simplicity, to any of the chemical plans, and enables the visiting practitioner to at once verify the presence of bile in the secretions by simple inspection, and to avoid the trouble of carrying chemicals about with him, or else bringing the secretion to his laboratory.

The Œsophagoscope.

For the purpose of examining the walls of the œsophagus Dr. MORRELL MACKENZIE has devised an œsophagoscope of simple construction. It consists of two parts—a stem and a skeleton tube. The stem is made up of a handle and a shank, between which there is a hinge. The skeleton tube is only formed when the instrument has been introduced into the gullet; before that it consists of two flattened wires placed anteriorly and posteriorly, connected above and below, and at certain intervals between these points, by rings. When the rings lie in the vertical position. the wires are separated from each other only by the thickness of the rings; but when the latter are thrown into the horizontal position, the two wires become separated, and, with the rings, constitute a kind of skeleton speculum. At the top of the back wire there is a slot, into which the stem of a laryngeal mirror is fitted. The handle and shank are almost in a line—a position which greatly facilitates the introduction of the instrument. When the 'body' has been passed down the œsophagus, the operator, holding the handle in his hand, but leaving the index-finger free, presses with the latter on the upper part of the shank near the handle. The result of this is to turn the rings from the vertical to the horizontal position, and thus to open the speculum and expand the gullet. With this instrument the œsophagus can be inspected from three to five inches down, and local applications can be made to ulcers, etc.

The Psychrophor.

In these days of 'scopes, a means by which we can obtain at once a cold and a clear light is a valuable discovery. Such an invention is among the recent additions to our resources. At the Congress of German Surgeons, lately held in Berlin, Dr. MICHAEL, of Hamburg, exhibited an apparatus he used for the purpose of illumination, without the aid of lenses or reflectors. It consists of a glass globe, exhausted of air, and containing phosphorescent substances in powder. These substances are made luminous by means of an aluminium electrode, which is brought into contact, by means of a hard-rubber handle, with a Ruhmkorff's induction machine. The light can be regulated according to the strength of the inductor; with a weak apparatus, sufficient light is produced to enable small print to be read, when held near the eye. In its present form the instrument, which Dr. MICHAEL terms the psychrophor (cold light), is regarded by him as suitable for illumination in operations on the abdominal cavity and vagina, when the parts are not accessible to daylight. He hopes also to be able to make it available for cavities with narrow orifices.

An Extra-Sensitive Thermometer.

PROFESSOR DUFOUR, of Paris, has devised a small thermometer, so sensitive that it will denote, by a deflexion of the index needle of nearly two inches, the entrance of a person into the room where it is placed. The apparatus consists of a short bent tube, carrying at one end a bulb, which is coated externally with lampblack. The tube is partially filled in the lower part of its bend with mercury, and is balanced on a steel knife blade, exactly like the beam of a scale. Above the knife edge extends an index needle, which moves across a graduated arc, as the bent tube swings. Beneath hangs a rod, to which is attached a small weight, to balance the needle, so as to make it point to zero on the arc. When

the temperature rises, be it ever so slightly, the heat, being absorbed by the lamp black, dilates the air in the bulb, and drives the mercury to one side. The centre of gravity of the apparatus being displaced, the bent tube is put out of level, and the needle will immediately turn toward the right. When, on the contrary, the temperature decreases, the needle will point toward the left.

The Sphymograph.

In some quarters the complaint has been heard that the tracings of the sphygmograh have not thrown as much light on disease as was expected. This subject came up for discussion last fall, before the St. Louis Medical Society, and we extract from the reports of that Society, in the St. Louis *Medical and Surgical Journal*, some sensible observations on what can properly be expected of this instrument:—

Dr. Baumgarten observed that the sphygmograph cannot diagnosticate a case of Bright's disease, or disease of the heart, but it may lead to, and assist the diagnosis. It is of the greatest value in determining certain points about the circulation, and is sometimes invaluable in prognosis. Of course, in order to derive all the advantages the instrument is capable of, we must learn in the first place how to take perfect tracings, and next how to interpret them correctly.

Dr. Papin thinks that if the instrument is of no more use than to make a normal tracing when the heart is abnormally affected by indigestion or otherwise, and so quiet the fear of the patient, it accomplishes a great deal.

Dr. Baumgarten.—With regard to the value of this instrument in determining organic disease of the heart, we can readily see what will be the effect of organic disease of the heart on the pulse tracings. In aortic disease, the effect upon the pulse tracing is very direct. In mitral disease, the influence upon the circulation is not immediate, and so long as the vigorous ventricle can compensate the mechanical defect of the valves, it may be that no change whatever is produced in the tracing. Disease of the right heart, finally, can have no *characteristic* influence upon the tracing of the radial pulse. It is true that these considerations may sometimes be used to determine the exact nature of a valvular defect, when the physical signs alone would not determine it.

Dr. Bryson said that the mere fact that the sphygmograph can be used to determine high aortic pressure when it exists, is of great advantage in clinical medicine. A patient with habitually high blood-pressure will bear fever badly; the heart will be apt to give out.

The Thermograph.

Under this name the *Scientific American* notices the invention of an instrument capable of recording automatically the rise and fall of the temperature of the body, for a given length of time. Its principle is, causing the electrical resistance of a fine powder in a tube to vary by means of pressure from heat. A vulcanite tube is filled with a fine powder made of plumbago, gas carbon and silver; these contents abutting at either end against a platinum knob. One knob is attached to a hard-rubber bracket, and the other (which imparts the varying pressure) to the free end of a spiral spring, constituting the thermometer proper. This spring is made of two slips of brass and steel soldered together, the brass occupying the outer side. The more expansible brass, on rise of temperature, causes the free end of the spring with its terminated knob to twist, and so exert increasing pressure on the tube-contents. An electric current is sent through the substance in the tube, entering and leaving by binding posts, and its variations with the varying pressure effect an ingenious electromagnetic mechanism, which produces on a moving surface a sinuous line, the graphic representation of the changes of temperature. The thermometric part of the apparatus is suitably enclosed in a circular, perforated, German-silver case, which is secured in proper position in the arm-pit. Dr. ADAMS, of Colorado Springs, the inventor, is arranging to obtain on the same slip of paper not only a curve of the febrile condition of the patient, but also a sphygmographic and respiratory curve, so that the inter-relationship of these cardinal symptoms under varying circumstances may be easily studied.

The Tocograph.

A method of accurately measuring the contractile efforts of the uterus would have important results in obstetrics. To effect this the "graphic method" has been recently applied, by M. POULLET, to the study of the dynamic phenomena attending expulsion of the fœtus. From experiments made with an instrument of which he is the inventor, the tocograph, he has arrived at the conclusion that the force expended by the uterus is equal, usually, to about forty pounds, never exceeding fifty pounds.

M. POLAILLON, in a report to the Soc. de Chirurgie on M. POULLET'S memoir, stated that, with a similar instrument, he had found the intra-uterine pressure to be about thirty-five millimeters of mercury. He also studied the uterine contraction, which during labor is slow and painful. The contraction lasts 106 seconds; during its continuance the ascending curve (courbe) is relatively short, thirty-eight seconds. The pain lasts but half as long as the contraction; it commences when the mercury has mounted to twelve millimeters and disappears before the contraction is completely finished. M. POLAILLON de-

termined that when the orifice (os) is dilated to about five inches diameter, the pressure which brings about the expulsion of the head amounts at least to twenty pounds for each contraction.

Correspondence.

Failure of Carbolic Acid Injections for Hemorrhoids.

Ed. Med. and Surg. Reporter:—

The medical journals have, for some time, teemed with reports of hemorrhoids successfully treated by carbolic acid injections. Unfortunately the failures have not been recorded. I have had a failure, and am disposed to think others may have been alike unfortunate. Case.—E. B., age fifty, female, disease of recent occurrence and short standing. She assures me that during her child-bearing she never suffered from piles.

When first examined there were three soft, exceedingly tender, tumors, protruding from the anal orifice, ranging in size from a common currant to a cherry, though not quite the shape these objects indicate. To return these within the sphincter ani was very painful, and when returned they would only remain inside until the next defecation.

The bowels were regulated by

℞. Cream tartar,
Flor. sulphur, āā ℥ ij
Glycerine, q. s.
Make into a confection.

Sig.—A sufficient amount to be taken every day to keep the bowels moderately open.

The patient was directed to bathe the parts in hot water after each movement, return the piles, and anoint the parts with the following:—

℞. Tannin, ℥ j
Ext. belladonna, ℥ ss
Cosmoline, ℥ j.
Make into an ointment.

She was to push a small amount of this ointment into the bowels. This course of treatment hardly amounted to a palliative, hence it became imperatively necessary, as her suffering was great, to consider the radical cure of the condition.

The patient was of large frame, slightly inclined to corpulency, of a healthy and robust family, had always enjoyed good health, and had not the usual history of costive habit of bowel that precedes hemorrhoids so commonly. She was excessively nervous, was afraid of chloroform, and could not be brought to consent to the ablation of the tumors by the knife or scissors. Hence I concluded to try injecting them with carbolic acid. One of the piles was selected, and three drops of a fifty per cent. solution carefully introduced, producing intense pain, that lasted for hours, necessitating a hypoderm of morphia. At the end of about four days suppurative inflammation had taken place and the pile was destroyed.

I was not satisfied with the method. It caused too much suffering, and ending with suppuration, gave me the image of a possible rectal fistula to follow. I now urged the use of the scissors for the removal of the two remaining tumors. My patient was firm in her refusal to submit to anything but the injections. Accordingly the second one was in due time treated precisely as the first had been, with the patient, however, under chloroform this time. Result, pain and inflammation, but no suppuration or breaking down, no shrinking or shriveling up; on the contrary, it had been converted from a soft pile, that could be returned within the sphincter ani, into a hard and very painful one, that could not be returned. But the third one, that had not been meddled with, had apparently disappeared.

My patient was now suffering so much that she reluctantly consented to its removal with the scissors. She was brought under chloroform, and with a finger in the rectum, to steady the parts and bring the tumor into sufficient prominence, it was removed by a clip, with a stout pair of flat-curved scissors. The other one was searched for, but could not be distinctly made out. This wound healed kindly, and did not give my patient nearly the pain the carbolic injections had done. But our troubles were not at an end, as ten days sufficed to bring out the remaining pile very prominently; this was then also removed by the scissors, and healed kindly.

But still the patient had pain and uneasiness in the structures about the anus. Some ten or fifteen days after the last operation sufficed to reveal what was following, viz., fistula in ano. This has just been laid open with the knife, in the hope that we are near the end of the chapter.

Upon the whole, I think, I shall never inject carbolic acid into hemorrhoids again. I have also a suspicion that the injections of carbolic acid may have acted as, at least, the exciting cause of the fistula. Will some one else report their failures with this method of treating piles?

Colorado. G. Law, M.D.

News and Miscellany.

The Pennsylvania Registration Law.

In the Reporter for June 25th we published the full text of this Act. But so many inquiries have been made about its various clauses that we think it well to publish some explanations of its sections, furnished us by Dr. R. L. Sibbet, Chairman of the Committee on Medical Legislation. Referring the reader to the number for June 25th, p. 708, for the text, we insert the following commentary:—

Section 1. The Prothonotary shall purchase a book of suitable size, and shall keep it in his office for inspection by the public. He "shall set apart one full page for the registration of each practitioner." This does not mean that he shall use two pages for the registration of each practitioner. The affidavit is part of the registration, and must follow it immediately, and must not be made on a loose sheet of paper, now offered for sale at $2.00 per hundred. The prothonotary must leave a space at the bottom of the page for a note when the practitioner removes from the county or departs this life.

The Register is a record book, and must not be filled with items of information not required by the law.

Sec. 2. There are two principal classes of practitioners provided for, those with the degree of Doctor of Medicine and those without it. They are placed under equal obligations.

(*a*) The practitioner who has a diploma must show it to the Prothonotary. He must make a true copy of it and make affidavit to the genuineness of the diploma, and the correctness of the copy, and sign the affidavit. If he has lost his diploma and can present a true copy he must make affidavit to these facts and then ask to be registered. But if he cannot present a true copy of his diploma, then he must present a certified statement, giving the name of the institution that issued the diploma and the names of all the professors whose lectures he attended, and the branches of study on which they lectured. The practitioner who shall commence to practice medicine in this Commonwealth with a diploma issued by an institution in any other State or foreign country must have the diploma endorsed by one of the medical faculties of this State, after which he may apply for registration.

(*b*) The practitioner who is without the degree of Doctor of Medicine and has been a resident practitioner in Pennsylvania since 1871, must present a statement and must make affidavit to it, after which he may register; otherwise he must stop the practice of medicine.

Sec. 3. Each practitioner must sign two affidavits, the one to be filed and the other to be recorded on the page of the Register.

Sec. 4. The Prothonotary must file the certified copies of the diplomas and the certified statements in his office, and he must register the practitioner. He must not give a "Medical Certificate," such as have been offered for sale at $1.50 per hundred, but a receipt for one dollar.

In regard to this city, we may add that in accordance with the provisions of the Act, Wm. B. Mann, Esq., Prothonotary of the Courts of Common Pleas, has just opened a book for the registration of all practitioners of medicine and surgery in the county. The book, which is known as the "Medical Registry of the County," is in charge of Clerk S. B. Hoppin, No. 9 State House Row.

The Chicago Faster.

At noon on July 12th, "Dr." John Griscom, at Chicago, Illinois, reached the end of his fast of forty five days. During the whole of that time, so it is said, nothing but water passed his lips. His commencing weight was 200 pounds and his health good. At noon, July 12th, just before he broke his fast, he weighed 147½ lbs., his pulse was 66, respiration, 15, temperature 98, general strength and condition good. About two hundred persons assembled to witness his successful close of his task. The hero of the day quietly walked around, superintending the arrangements, talking to the reporters, and even helping the waitresses to handle the articles of food, showing in the meanwhile no signs of unusual hunger or excitement. When the curtain went up the audience applauded heartily, and Griscom made a little speech, setting forth his well known views about fasting. He said he believed that much physical sickness and distress was due to overcrowding the system with food products, and he has attempted, and successfully, to show that abstention from food could be safely undertaken. He had once recovered, by reason of fasting, from an illness which the doctors had pronounced fatal. He did not advise promiscuous fasting, but desired scientific attention to be given the subject, with a view to hereafter obtaining any advantage there might be in it as a remedial agent. He was hungry, but not ravenous. Fasting was both a mental and a physical test. Will power had much to do with its success. He had ordered an elaborate menu, not because he expected to eat much, but to satisfy his imagination, as well as his appetite.

He then, amid renewed applause, sat down, and, with the words "Here's looking at you," lifted a glass of milk to his lips and slowly drank a gobletful. Turning out another glass, he took a few swallows more, and then turned his attention to the milk toast, eating very deliberately, and stopping to chat with his companions on the stage. "How does it taste?" shouted one of the spectators. "Very good, I assure you," was the reply! "But I really do not feel more hungry than if I had fasted but a day or two."

Whether this fast was as rigid as it purported to be, we do not know, but taking for granted that it was, the result is quite interesting in many respects. We do not sympathize with those who decry such experiments as foolish and useless. Properly conducted, they teach much of the powers and limits of endurance of the human body in health; and they can be considered useless only to those who cannot, or will not draw from them the lessons they are capable of conveying.

The Case of the President.

To the gratification of all good citizens and right thinking men everywhere President Garfield has steadily advanced toward recovery. It is probable that the wound was not so severe as was at first supposed. The liver and kidney appear to have escaped any actual laceration, though perhaps they were considerably bruised by the transmitted force of the ball.

An interesting and plausible theory of the injury has been published by Prof. Faneuil D. Weisse, of New York. He has stated his belief to be that, by some fortuitous circumstance, the ball had been deflected from its course by striking and fracturing the eleventh rib; that it had passed along the anterior surface of the transversalis muscle, which forms the interior muscle wall of the outer half of the loin, passing between the transversalis muscle posteriorly and the kidney and ascending portion of large intestine anteriorly; thence into the iliac fossa, between the iliacus internus muscle—which forms the bed of the right groin—posteriorly and the cæcum or commencement of the large intestine anteriorly; thence continuing downward and inward, through or behind the psoas magnus mus-

cle, to the right side of the lower cavity of the abdomen, there inflicting an injury to one or more of the nerve trunks of the sacral plexus.

Experiments on the cadaver and the course of the symptoms have rendered these suggestions probable.

The interest that has been taken by the public in the minor details of treatment has been great, and has also been quite instructive to them, giving many, no doubt, the first correct notions of the antiseptic treatment they have ever had.

It is to be regretted that any report of a lack of harmony among the professional attendants should have been given publicity. It is easy to magnify such occurrences and give them a much more sensational coloring than they really have.

The Hot Spell and Its Fatality.

The great heat of this month has run up the mortality in all the large cities. Temperatures of 103° and 105° in the shade were reported from Louisville, St. Louis, Cincinnati and elsewhere. In New York city the deaths in the first week of the month ran up to 1144, which is nearly double the average. Most of this increase is among children and in thickly settled districts. The Board of Health has begun a thorough campaign among the tenement houses in all parts of the city, and for that purpose the services of some fifty young physicians have been engaged. Each received a pad of prescription blanks, a note book, and a quantity of tickets for free excursions, the latter to be distributed among the sick poor, where, in their judgment, they may be needed. Avoiding interference with private practice, they are to treat sick children with care, and advise distressed mothers. Their prescriptions, in all cases, are to be free of charge. If a bad sanitary condition prevails in any house they are to report the fact at once to the regular Health officers, and weekly reports of what they may observe otherwise are to be made to the Health Department. The city, for the purposes here indicated, is to be divided into fifty districts.

Deaths from sunstroke, at the rate of twenty to thirty a day, were reported from St. Louis, Memphis, Louisville, and Cincinnati.

The Plague.

It appears from recent observations that the plague which, since last November, has been destroying large numbers in the Euphrates Valley, is, in fact, a continuation of the same epidemic which in 1877 extended into Russia. It can even be traced back to 1858, when it first appeared in Mesopotamia after it had been thought to have been extinct for more than a century. It is capricious in its travels, sometimes extending rapidly, at others slowly, sometimes ravaging country districts and sparing cities, at others prevailing chiefly in the latter. The present epidemic presents the usual symptoms, to wit, excessive lassitude, anorexia, high fever, ardent thirst, headache, fuliginous tongue, haggard look and glassy eyes, diarrhœa, vomiting of blood, bloody urine, buboes in armpits and groins, petechiæ, and latterly carbuncles, prostration and death after twelve, twenty-four, or forty-eight hours' illness. It shows itself especially as a house epidemic, attacking and killing several members of one family.

The Smallpox.

The ravages of this disease continue to extend in spite of the warm weather, which usually checks it. In New Brunswick, New Jersey, thirty cases were reported in the first week of this month. A sudden increase of the disease occurred at the same time in Jersey City; eight new cases being reported in one day. The *Every Evening*, of Wilmington, Delaware, says, "The smallpox is increasing in this city, simply through the lack of proper measures to check its extension." A special hospital, it adds, is imperatively demanded. In Havana, Cuba, fifteen deaths from the disease occurred during the first week in July. Weekly deaths from it continue to appear in the Philadelphia mortality returns. It looks as if some united and determined measures would have to be taken. Shall vaccination and revaccination be made compulsory?

Resection of the Stomach.

After eating some fish, a young man in Geneva, Switzerland, was attacked with acute pains in the stomach. As they did not yield to the usual remedies, the attending physician, Dr. Wagner, inspired by the example of Billroth, promptly opened the abdominal walls, slit up the stomach, and removed some fish bones which were attached to its sides! At last accounts the young man was progressing favorably. This incident, gravely given in the *Allgemeine Med. Central Zeitung*, June 4th, if true, is an astounding example of reckless surgery. But perhaps it is intended for what Artemus Ward called "a goak."

The Yellow Fever.

The Marine Hospital Service, at Washington, was advised, on July 9th, that "two or more cases" of yellow fever had developed on the British bark Emma Paysant, from Vera Cruz, in quarantine at Pensacola.

In Havana, the deaths from this disease numbered twenty-three during the first week in July. Scattered cases have been reported by the United States Consuls in Barbadoes and Porto Rico, since May 1st. The fever is, however, not regarded as epidemic in either of these islands.

Homœopathic Items.

—The regular profession in Germany have appealed to the authorities to prevent homœopathic physicians dispensing medicines, as is the case with others. The appeal, however, has not been sustained.

—A medical paper at Leipsic has been fined 100 marks and the costs of suit, brought by seventy-five homœopathic doctors, for publishing a lecture before a Berlin medical society, in which

homœopathy was denounced as quackery and swindling.

—The homœopathists are holding an International Convention in London. The first session was held July 12th. Dr. Hughes, President of the Convention, said it was a bold thing for men to make an appointment to meet again in five years, as they did in Philadelphia in 1876. Dr. Hughes made several practical suggestions, the most important being that there should be one homœopathic pharmacopœia for all countries. A discussion followed upon the condition and prospects of homœopathy in which Drs. Tolbert and Degersdoff, of Boston, Massachusetts, and Dr. James, of Philadelphia, participated.

Cremation.

On June 2d the fiftieth cremation was carried out in the crematory at Gotha. It is found to be somewhat expensive, as it costs a minimum of nearly fifty dollars for fuel, use of apparatus, coffin and pay of attendants. Were it not for this it is believed the number would have been much greater.

Personal.

—Dr. J. M. Toner, of Washington, D.C., has sailed for Europe, as one of the Delegates to the International Medical Congress.

—At the annual meeting of the Trustees of Harvard College, July 13th, Henry W. Willard, M.D., was elected Professor of Ophthalmology, and James C. White, M.D., Professor of Dermatology.

Items.

—The Publication Committee of the International Medical Congress expect to spend $30,000 on the publication of its Transactions. The volume will be something unique at this rate, at least in paper and pictures.

—A woman in Jackson County, Tennessee, is said to have been delivered, on June 20th, of *seven* children at one confinement, all girls, weighing from four to five pounds each. The authority for this tough story is the Nashville correspondent of the Louisville *Courier Journal*.

—Hermaphroditism seems to be far from uncommon in Paris. At a recent meeting of the Société de Chirurgie, M. Magitot showed an individual, aged forty, who had originally been brought up as a female, and was married as such at the age of seventeen. Since then this person has become a widow (?), and a total change of sex has occurred.

—At a recent anti vivisection meeting in London, Cardinal Manning declared that "so long as life was granted to him he would do his utmost to put an end to the detestable system of vivisection, which, since it could not be properly controlled by law, ought to be totally abolished." At the same meeting the Lord Chief Justice of England, who is not a medical man, declared that he was a "reluctant and unwilling, but at the same time a complete and absolute convert to this view of the subject."

OBITUARY NOTICES.

—Dr. W. Scott Hendrie, a well-known physician in Holmesburg, Pa., died at his residence in that place on Sunday, July 10th, aged about forty-five years. Dr. Hendrie was the chief physician at the House of Correction, having been elected March 10th, 1873, and served continuously until his death.

—Prof. George Rolleston, M.D., of Oxford, England, died June 16th. He was an able lecturer and writer on physiology. Several of his works, especially his *Forms of Animal Life*, have been highly appreciated.

QUERIES AND REPLIES.

Simmons' Liver Regulator.

To *W. C. G., of Tenn.*—The recipe for Simmons' Liver Regulator is, or ought to be, as follows:—

℞.		
	Sennæ comp.,	℥ij
	Serpentaria root,	℥ij
	Golden seal root,	℥j
	Manna,	℥j.

For a one-dollar package, worth in St. Louis 0.08¾.

This I find in a druggist's private recipe book, and corresponds with my recollections when living in the same village with Dr. M. A. Simmons. F. F. P.

Comanche, Texas, June, 1878.

Muscular Rheumatism.

Mr. Editor.—I would suggest, in reply to H., of Iowa, the following prescription:—

℞.			
	Pot. et. sod. tart.,	℥ij	
	Pot. nitrat.,	℥j	
	Pot. iodid.,	℥ss	
	Fl. ext. colchic., (U. S. P.),	℥ss	
	Aquæ,	q. s.	Oj. M.

Sig.—One tablespoonful three times per day. Dover's powders, grs. x, as may be necessary to control the bowels and procure rest.

For chronic muscular rheumatism I would suggest the chlor. ammonia and arsenic, say—

℞.			
	Chlorid ammonii,	℥j	
	Acidi arseniosi,	gr. iss	
	Aquæ,	q. s.	Oj. M.

Sig.—Tablespoonful three times per day.

℞.			
	Sulphate quinine,		
	Dover's powders,	aa	gr. vij. M.

Sig.—At once, on going to bed.

South Carolina, July, 9th. T. B. Hinnant, M.D.

Dr. S. T. L., of Ohio.—Yes; Ziemssen's *Cyclopædia* has undergone a second and revised edition in Germany, with many valuable additions; but there is not the slightest probability of its being revised in this country.

Dr. J. J. S., of La.—The papers and pamphlets have been received and will be carefully examined. Thanks for them. We are always glad to receive material which can be made of interest to the profession.

Mr. Editor.—Accuracy on the part of physicians, in observation and description, is surely of first-rate importance. Now, L. L. Doty, M.D., of Mosiertown, Crawford Co., Pa., is an example to which I call attention. If he is inaccurate in one feature of what he says he observed—in his *lusus naturæ*, the *sheep baby*—he is possibly unreliable in other and more important features. He says the "central incisors in both jaws were such as is seen in the lamb." Well, who ever saw incisor teeth in the upper jaw of a lamb, or a sheep either, for that matter? B. F. S.

THE

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Original Department.

Lecture.

ON THE DIAGNOSIS OF ABDOMINAL TUMORS.

Delivered at the Paris Faculty of Medicine

BY M. DUPLAY,

Professor of Surgery.

Translated for the Med. and Surg. Reporter.

Gentlemen:—We have passed in review, in the preceding lectures, most of the affections of the abdominal and pelvic viscera, paying particular attention to those which interest us at a surgical point of view, and as regards other species of tumors, retaining the facts necessary in order to form a diagnosis.

I have concluded to consecrate this last lecture to the diagnosis of abdominal tumors; it seemed to me that a consideration of the ground we have passed over would be a fitting conclusion of our studies, permitting us to make a résumé at a general and practical point of view.

But so vast a subject cannot receive proper attention in one lecture; for that reason I will take into consideration solely those tumors contained in the abdominal cavity, and which have a special surgical interest, either as regards diagnosis or treatment; those tumors which are confined to the pelvic cavity, or have not, as yet, progressed beyond its limits, will not be touched upon.

The diagnosis of abdominal tumors is never facile, and is often very difficult. Every case, no matter how simple in appearance, requires minute examination. Be on your guard against the too hasty formation of a diagnosis without sufficient consideration, because the case appears too simple. Errors made in this way are without number, and even by skillful men, all the signs seeming to confirm the exactitude of the diagnosis. In every case, then, a minute and well-ordered examination should be made. We are happily rich in means of investigation; some long known, others conquered by modern science; it will be of service to recall them briefly to your recollection.

Inspection, which is the first means used in forming a diagnosis, will reveal to you the alterations in the external aspect of the abdominal parietes, the volume and the form, regular or irregular, of the abdomen, its lateral enlargment, as in ascites, or any prominence auguring the presence of a visceral tumor. Inspection shows also any change in the coloration of the integuments, and in some cases the dilatation of the subcutaneous veins. By the position and the manner the abdominal parietes is raised over a tumor, you will be able to form an opinion as to its seat, and from what organ it arises. You will examine your patients standing, and also in the recumbent posture, in order to determine what modifications in the shape of the abdomen are brought about by the change of position.

Palpation, the patient being placed in the position proper to relax the abdominal walls, will inform you concerning the limits, the form, and particularly the consistence of the tumor. It is by careful and skillful palpation that you will learn whether the tumor is fluctuating or resistant, liquid or solid, or containing at the same time liquid and solid constituents. Palpation will determine also if the tumor is mobile, and in what direction it may be moved, whether

laterally, from below upward, or *vice versa*; you will seek whether there are any movements of expansion in the tumor itself, or provoked by the respiratory movements. You will thus also be able to appreciate its relations with neighboring organs, and at present we are able to recognize by palpation when certain abdominal organs, the liver, the spleen, are hypertrophied or displaced. By displacing the skin over the tumor, or moving the latter while the skin is maintained immobile, some friction sound (frottement) may be rendered evident; long and attentive pressure over the tumor will reveal the existence of pulsations, if they are present.

By *percussion* the tumor may be circumscribed within certain limits; there is dullness, which is fixed or changes place, according as the tumor is mobile or not; a point of origin may be assigned to a tumor also as the dullness is continuous with that of a neighboring organ, or on the contrary separated from it by a zone of clear resonance.

You are aware by what modifications of percussion the sensations accompanying displacement of liquid, gurgling, hydatic thrill, collision of calculi (in the gall bladder, kidney) are obtained.

Auscultation enables us to recognize the existence of friction sounds, of vascular murmurs; to detect the heart sounds of a fœtus, or again the souffle of an aneurismal tumor.

To these different means you will add the exploration of the abdomino-pelvic cavity by the natural orifices.

Rectal exploration is rarely of great service in the cases of abdominal tumor which we have at present under consideration; sometimes, however, it will demonstrate the presence of prolongation or extension of the tumor into the pelvis. Rectal exploration by the method of Simon (of Heidelberg), if indeed the term method can be applied to such manœuvres of effraction, which consist in introducing successively the hand and then the forearm into the rectum, is not exempt from danger, for death ensued in several cases; I have mentioned it only in order to condemn it.

Vaginal touch will furnish precious and important information regarding the condition of the cervix and uterus, as to whether the organ is depressed or not; concerning the changes in the form, volume, consistence and direction of the organ; on the state of the culs-de-sac and the relations of the tumor with the pelvic organs.

Even when negative, vaginal exploration is of service, and should never be neglected. Nor should the bladder be passed over without examination, the extreme dilatability of the urethra in women rendering its exploration facile. You all know that suspected tumors have sometimes been instantly cured by catheterism; again the introduction of a catheter will inform you concerning the relations of the tumor with the bladder, and will allow you to recognize any deviation or adherence of the urinary reservoir or of the urethra.

By combining palpation of the abdomen with rectal or vaginal exploration, or again with catheterism, some precision regarding the relations of the tumor with the pelvis, the abdominal parietes and the pelvic organs, may be arrived at.

Puncture with the needle of the aspirator is entirely innocuous with the apparatus at present in use, and offers immense advantages for diagnosis. By such means you will be able to determine definitively whether the tumor is solid or contains liquid, and, if so, the nature of the liquid; and thus finally, by the aid of chemical and microscopic examination, the nature of the tumor and its origin. The disappearance, complete or partial, of the tumor after puncture will demonstrate whether it is uni or multilocular, and whether it adheres or not to the neighboring organs.

Any incision as a means of exploration should be reserved for cases which remain obscure notwithstanding the employment of all the preceding means of investigation, and then only when the life of the patient is menaced.

Such then, gentlemen, are the means placed at your disposition for the diagnosis of abdominal tumors. We will now consider in what manner this diagnosis may be arrived at.

In the first place, you will obtain from the patient an account, in detail, of the malady, noting particularly the functional troubles or their absence; the period when the tumor first appeared and in what direction it has developed, whether laterally, from above downward, or vice versa; and also whether the enlargement was gradual or more rapid at some periods than at others; you should also inform yourself whether there has been pain at any period or not. Being thus informed, and guided by the replies of the patient, you will be able to enter upon the local examination of the tumor, according to the rules we have already laid down.

When you have first clearly established the existence of a tumor, you can then proceed to determine its seat and nature.

Sometimes the tumor seems to occupy the entire abdomen, while in the other cases, on the contrary, the affection seems to be clearly limited and circumscribed; whence the first grand division of abdominal tumors into diffused and circumscribed tumors.

We will consider first the diffused tumors; this part of our task once done will render the remainder more facile. The affections which give rise to the sensation of a diffused tumor of the abdomen are, fatty surcharge of the peritoneum, the gelatinous disease, chronic peritonitis and ascites.

You will recognize the fatty surcharge by the tumors formed by the fat infiltrating the serous layers; they have no precise limits, are soft and without fluctuation. The embonpoint is generalized and the abdominal parietes are loaded with fat. It is particularly in women who have borne many children, or at the period of the change of life, that you will meet with this exaggerated development of fat in the cellular tissues, which may be taken for a tumor. We are now well acquainted with the gelatinous disease (maladie gelatineuse), so rare and so difficult of diagnosis, recognizable, however, by the fluctuation without change in the dullness, the constant pain, the alteration in the general health of the patient, and by the qualities of the small quantity of liquid obtained by puncture.

Chronic peritonitis, in its different varieties, is characterized by inflammatory antecedents, symptoms of derangement of the digestive organs, sensibility of the abdomen on pressure, and the state of general cachexia; also by the unequal distribution of dullness and clear sound, while palpation reveals here and there portions hard and solid, with other portions just beside them less resisting or even fluctuating.

I do not wish to return on ascites, concerning which I have spoken several times; you are sufficiently well acquainted with the symptoms and signs. I must, however, call to your attention the frequent coexistence of ascites with an abdominal tumor. You are aware that by suddenly depressing the abdominal parietes, ascitic liquid is displaced, and the presence of a tumor may be made evident. Superficial puncture, the trocar not being deeply introduced, will permit the evacuation of the ascitic fluid, and will enable you to perfect your diagnosis, at the same time that you may form some conclusion, from the nature of the liquid evacuated, regarding that of the subjacent tumor.

We will suppose that your examination has demonstrated the presence of a circumscribed tumor; you should then seek to determine whether the tumor is really intra-abdominal, and not limited to the abdominal parietes.

The tumors in the antero lateral part of the abdominal wall, cysts, fibromas, etc., are generally distinguished with facility from intra-abdominal tumors; they may generally be isolated by raising up the integuments with the fingers; again, the abdominal parietes move when the tumor is displaced and with it, while intra-abdominal tumors are mobile and the movements of displacement are independent of those the integument. There are, however, difficult cases, where the tension of the abdominal parietes is extreme, or where the intra-abdominal tumor has very little mobility. When you find it impossible to pinch up the integuments over the tumor, and thus compare the thickness of the abdominal wall at this point with that at other points of the abdomen, you may force a fine and long needle into the centre of the tumor, and if the movements observed in the needle externally are isochrone with the respiratory movements, the tumor is intra abdominal. The tumors of the posterior parietes, retro-peritoneal, aneurisms, solid tumors, etc., which become enlarged toward the abdomen, are much more difficult of diagnosis, with the exception of aneurisms, which are recognizable by fixed signs; you can but suspect their origin and nature in the great proportion of cases.

If the tumor is found to be intra-abdominal, it remains to determine its point of origin. All the organs in the abdomen, digestive tube and its accessory organs, genito-urinary apparatus, serous lining, may give rise to tumors, and you will often be much embarrassed; but you will be often successful if you pay particular attention to the antecedents of the patient, to the sex, the relative frequency of tumors and the symptoms peculiar to each variety. We will briefly recall the principal.

The tumors of the liver and spleen are developed from above downward; their dullness on percussion is continuous with that of the organ; sometimes the hypochondrium over the tumor is very prominent, and the ribs pushed outward; when the tumor is very large it may invade the thoracic cavity, and in such case the respiratory movements have an influence on it.

Among the tumors of the liver the abscesses and the cysts interest particularly the surgeon; and in examining them we have already insisted on the research into the antecedents of the patient, on the utility of puncture with the

aspirator, the research for fluctuation, etc. We have also learned to recognize, by the seat and the form, the tumors formed in the gall bladder by retention of the bile or by a mass of calculi in the organ.

It is not very difficult to recognize the tumor formed by a hypertrophied spleen: the delicate point consists in determining whether the hypertrophy is idiopathic, and calls for surgical intervention, or, on the other hand, if it is due to amyloid or fibroid degeneration, or to long exposure to miasmatic conditions.

In general, tumors of the kidney are recognizable by their situation and mode of development; the tumor originating in the lumbar region is developed from behind forward; ulteriorly it will tend to descend toward the pelvis. The situation of the colon and its relations with the tumor are of great importance; when the volume is not too considerable the clear sound (sonorité) of the ascending colon is found anteriorly to a tumor of the right kidney, and the dullness of the tumor above is separated from that of the liver by a zone of clear sound over the transverse colon; the same is true for the descending colon and the left kidney. When the tumor is sufficiently voluminous to compress the intestine, and change its relations with neighboring organs, these relations may be reestablished by injecting air, by the anus, into the colon.

You should not neglect the research of functional disorders, revealed by the actual or anterior existence of urinary troubles; nephritic colic, hæmaturia, urines containing pus, gravel or hydatic vesicles. Palpation and puncture will aid you in distinguishing solid from liquid tumors. Finally, floating kidney will be recognized by the form of the tumor, which reproduces that of the kidney, and is smooth, like that organ; this last could be confounded but with an accumulation of fæces, which has neither the same form nor consistence; again, the form of this last may be modified by pressure, and purgatives cause complete disappearance of the tumor.

We have, gentlemen, passed successively in review the tumors which are developed from above downward, and those increasing from behind forward; we will now cast a rapid *coup d'œil* on the tumors which invade the abdominal cavity from below upward; I speak of those tumors which originate from the uterus, ovaries, etc.

Besides their mode of development, they are accompanied generally by functional troubles of variable nature, accidents due to compression, and they are more or less accessible to rectal, vaginal, or vesical touch, which will inform you concerning their relations with the pelvic organs.

But, before entering on the consideration of the differential diagnosis of these tumors, it is proper to draw your attention to two frequent causes of error: The development of the uterus containing the product of conception, and the tumor formed by the bladder distended with urine. You have been already cautioned concerning these sources of error; I repeat the caution; and even then, gentlemen, I would not dare affirm that you will not commit, at least once, this mistake.

This error, which appears so gross, is an every-day occurrence; what surgeon is there who has not received, at the hospital, or at his consultation, patients supposed to have cysts or fibromas, who had but a retention of urine, or were pregnant?

The means of avoiding this error is nevertheless facile; it suffices to think of these accidents in every case.

No matter how improbable it may appear that the person should be pregnant, in spite of her indignant denials, you will always search for the general or local signs of a normal or extra-uterine pregnancy. Even when the patient asserts that she passes urine regularly, you will introduce the catheter, to convince yourself that the patient does not pass water more or less regularly by regorgement, although the bladder may be distended by three, four or six quarts of urine.

We now arrive at the consideration of those tumors of the ovaries and uterus which have been more specially the object of our lectures this year; as I have insisted on their differential diagnosis in treating of each, it will suffice to refresh your memory by recalling their general features (traits generaux). For tumors of the uterus (myomas, fibromas and fibro-cystic) you will have recourse particularly to palpation and exploration by the natural orifices, combining the two; you will make a careful research for functional troubles; with puncture, to decide between fibromatous and fibro-cystic tumors. The mode of development, which is lateral, the relative independence of the uterus demonstrated with facility by vaginal exploration combined with palpation, are the principal characteristic signs of ovarian tumors; attentive palpation will permit an opinion regarding the nature of the tumor by the study of its surface and consistence. But puncture alone will give you

exact information regarding important points; whether the tumor is uni or multilocular, free or adherent; finally, the analysis of the liquid, and the elements (éléments figurés) which it may contain (calciform cells, sebaceous matter, hairs, etc.) will give important results regarding the nature and origin of the tumor. I would recall to you that the cysts of the large ligament (cysts of the parovarium) contain a liquid which is serous, very limpid, not albuminous.

No matter in what region of the abdomen the tumor is situated you will be on your guard against cases of encysted circumscribed peritonitis at the superior part of the abdomen; this condition is often an effect of the tumor of which it complicates the diagnosis; at the inferior portion, this form of cyst around the uterus, which it displaces, will be recognized by vaginal touch, mode of debut, inflammatory antecedents, etc., and if necessary, by puncture with the needle of the aspirator. Such cases of peritonitis toward the centre of the abdomen have no relation with neighboring organs; it is by the etiology and minute study of the antecedents that a diagnosis may be arrived at.

And tumors of the omentum should not be forgotten, no matter how rare; they can be recognized generally by their situation; in front of the intestine, on the median line, oftener below than above the navel. The tumor is spread like an apron, is relatively superficial, of unequal consistence over its irregular surface; it is nodulated, of great mobility, laterally and from below upward, and does not induce functional disorders of great gravity as do other tumors of the region.

After this rapid review, in which I have attempted to bring before you the sources of error and the difficulties attending the diagnosis of abdominal tumors, I think you will have been impressed with the fact that this is one of the most difficult chapters of practice and clinical medicine.

Communications.

TYPHLITIS—PERITYPHLITIS.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Indiana.

These two diseases and inflammation of the appendix vermiformis are not only quite nearly associated in their anatomical relations, but also in their symptoms of inflammatory involvement. This is so to such an extent as to render it quite difficult to differentiate between them at the outset of an attack.

To Prof. Bartholow, now of Philadelphia, is due, perhaps more than to any other in our day, the credit of giving careful attention to these diseases, in all their phases. In his late work on practice, he says: "The term typhlitis is restricted to an inflammation of the cæcum and its appendix. Perityphlitis is an inflammation taking place in the loose connective tissue on which the cæcum rests. Although the seat of the lesion and its nature are very different, it is necessary, because of their intimate relations, to consider them together" (pp. 69, 70).

The practitioner will not meet with many of these cases until he will experience great difficulty, early in the attacks, to differentiate between them. Often obstruction of the bowel may render the diagnosis still more obscure.

"Typhlitis in the mild form is distinguished from other affections of the bowels by the local pain and soreness, by the fullness without impaction; in the severe form, the symptoms of obstruction are the same as in other forms of occlusion, but the local pain and the distinct enlargement of the bowel indicate the existence of an inflammation and fecal obstruction of the cæcum. In these affections the decubitus of the patient is an important aid to diagnosis. Chronic catarrh of the cæcum is recognized by the locality of the distress." (Bartholow, p.72.) From cancer of the cæcum there are no means of differentiation early in the disease; but later the cachexia, the nodulated tumor, the slowness of the progress, with gradually increased pain and constitutional disturbance, will mark the malignant from the simple inflammatory cases.

The most common causes of these affections are the lodgment of a foreign body in the folds of the cæcum or appendix, or of fecal concretions, fecal impaction, exposures to cold, blows, severe strain from lifting or sudden twist of the body. I well remember a case reported to the Cincinnati Academy of Medicine verbally, by Dr. Fries, nearly twenty years ago, where, after long and serious trouble from inflammation commencing in the right iliac region, and involving the peritoneum and to a large extent the abdominal walls, forming sinuses in several places, and even forming them in the scrotum and about the penis, the case finally made a good recovery after discharging some grape seeds from one of the openings in the groin. (I think it must be the same case reported by him to Dr. Bartholow, and mentioned, with others, in the *American Journal of Medical*

Science, for October, 1866, p. 354.) Dr. J. W. S. Gouley relates a case (*Virginia Medical Monthly*), where an artificial tooth swallowed two years before was the *supposed* exciting cause of typhlitis. I well remember a case treated by myself and others for several different attacks, where the affection always seemed to be produced by eating seedy fruit, or any food quite difficult to digest. Foreign bodies, or intestinal concretions acting as such, may light up cæcal inflammation at almost any time, and in almost any person.

When we consider the anatomy and physiology of the parts involved, and the mechanical causes of inflammation of these tissues, the wonder is, not that we meet with so many such cases, but that we meet with so few of them. I have met with cases where exposure to cold was the exciting cause, as near as could be learned, and others where a severe blow acted as such. I distinctly remember the case of a coal miner who, having finished his day's work, had gathered his tools to go home, when, on turning around toward his path, his foot slipped suddenly. He felt a sharp pain in the right iliac region, which grew steadily worse until severe inflammation marked distinctly the character of his trouble. A case apparently caused by "stooping low in order to pass under a fence" is named by Bartholow (*American Journal of Medical Science*, October, 1866, p. 357), from the practice of W. Sly, Esq., of the British Army. I have seen it set up in one case several times by riding on horseback. I have at this writing a case of severe perityphlitis in a young lady of ordinary good health, seemingly caused by lifting some heavy domestic articles, while engaged at the usual spring house-cleaning. I remember other cases where no one cause could be named as exciting the inflammation. In February, 1880, I treated a very severe case, in a lad of twelve years, in whom the attack was certainly caused by rolling in the snow while coasting on the hill near his home.

As these diseases are barely mentioned by our works on practice—Bartholow's excepted—and by most not noticed at all, I shall enter into a detail of symptoms more fully than would otherwise be justifiable in an article like this one, simply intended for the current medical literature.

The first and most continuously prominent symptom is pain, more or less severe, in the right iliac region, which in pure typhlitis is confined quite closely to the cæcum, but may be reflected along the course of the colon. There will be marked tenderness on pressure, and soon a tumor can be felt, in size that of a walnut to a very large orange. Pain is proportionate to pressure. The limb will most likely be partially flexed, and the abdominal muscles will move as little as possible in carrying on respiration. The body is turned somewhat to the right side and flexed toward the inflamed parts, to secure muscular relaxation there. The soreness or pain is increased on standing or lying straight. In the mild attacks there is no impaction, but this is present in severe attacks. In either case the outline of the inflamed section can be distinctly made out. It will generally have a boggy feel. There is usually a constipated state of the bowels, vomiting generally present, often obstinate. The general system is soon affected, pulse quickened, temperature increased, tongue coated, appetite gone. These increase in proportion to the severity of the local affection, and the general depression early becomes well marked. In perityphlitis, the pain, though centering in the right iliac fossa, extends over much of the abdomen, even as high as the stomach at times; there is pain in the hip and down the inner face of the thigh, caused by pressure on the nerve trunks; sometimes there is œdema from pressure on the veins. When the appendix vermiformis is inflamed, whether alone or from extension of the inflammation to it from the cæcum, the pain reaches lower down, nearly or quite to Poupart's ligament; pain in the groin, hip and thigh. There is greater pain and tenderness and less disturbance with the action of the bowels than in either of the other forms.

The tendency of perityphlitis is more to suppuration than in typhlitis alone. Inflammation of the appendix is very apt to extend to the peritoneum, and perhaps more liable to result in ulceration and fecal fistula than either of the other forms.

Prognosis.—Under prompt and proper treatment generally favorable, but the disease may terminate fatally under the best management. It is a disease requiring close attention and the very skillful use of the remedies needed to combat it. At no time can the physician afford to trifle with these cases, however mild they may seem to be. Sometimes the ulcerative process is insidious and we have perforation of the bowel and the resulting peritonitis on our hands before we may anticipate danger.

The most favorable terminations are by resolution or discharge of the pus, if formed, through the bowel. If the abscess open externally, a fecal fistula may result, and often death, or, as

in Dr. Fries' case, before referred to, long months of miserable suffering before recovery is finally reached, and then only after severe surgical procedure.

My observation, if to be relied upon, has plainly taught me that when a person has once been the subject of an attack of either form of this disease he seems to be rendered far more obnoxious to it than before. In one case it recurred once in about four months from the first attack; then the case passed out of the neighborhood, so that I cannot give further account of it. In another case there were, within three years' time, at least five distinct and quite severe attacks; the last resulting in abscess, opening in the groin, which soon healed. After this there was far greater immunity from attacks.* Whether a foreign body was the continued local cause in this case, and discharged at the time of opening in the groin, or not, I cannot tell, as this occurred in a distant city, and the patient did not know.

Prof. Bartholow, in the paper published in 1866, before referred to, cites several cases that terminated in fistulous openings and death. Dr. Gordon Buck refers to cases requiring early operative interference, in consequence of the occurrence of suppuration, and to prevent its discharge into the peritoneal cavity—thus peritonitis and death.

In one case, treated by me, the walls of the abdomen seemed to be weakened, so that a hernia in the right groin occurred soon after recovery, without any other known cause for such a result.

I shall now relate, as briefly as may be, a few cases that have come under my hands, and in doing so give the manner of treatment which I have usually pursued, and which has so far proved entirely successful in every case. This uniformly good success has, in perhaps two instances, been more the result of good fortune than of any special skill upon my part.

Miss N., aged fifteen, of scrofulous habit, very delicate constitution, sallow complexion. Was called to see her October 18, 1870. She had been confined to bed for some days with severe pain in the right iliac region. I found there a tumor, the size of a large orange, very tender to the touch, and very painful. Bowels had been freely evacuated by domestic physic a few days before. The diagnosis was plain. I gave her large doses of opium, to allay pain and confine the bowels, ordered warm poultices constantly over the tumor. The decubitus here, as in nearly all these cases, was an inclination to the right side, with the limbs drawn partly up, also the body much flexed, semi-laterally, so as to relax the abdominal muscles on that side. There had been distinct rigors and excessive diaphoresis before I saw her. The pulse was small and weak; often there had been free emesis; the fever was high, and the general system was sympathizing greatly in the local trouble. There was no general peritonitis, the whole trouble being distinctly confined to the one locality. To the remedies above named, fluid nourishment, milk and beef essence, were regularly given, and later quinine and whisky quite liberally. I continued to see her daily. On the 29th I was gratified to find that she had discharged, per rectum, a large quantity of pus, and, though very feeble, was feeling much better. From this date onward there was rapid improvement, under tonics and careful feeding; no recurrence of the attack.

In this instance it was evident there was pus already formed when I first visited the case. At no time was there any symptom to indicate the near approach of the pus to the surface, to warrant me, as I thought, in the use of the knife. In the light of subsequent experience, and of reported cases, where the knife has and has not been used, I have no regrets to offer here, that I withheld all operative interference. It is true, the use of the knife may be deferred too long; but there can be no greater risk in too long deference, than there is in needlessly opening the abdominal cavity, which is especially dangerous when the enclosed tissues are already engorged or in an active state of inflammation. My good fortune here was fully as valuable to the patient as my practice. In a somewhat similar case—as to immediate symptoms, but involving the tissues more extensively—Dr. J. W. S. Gouley, with the concurrence of Dr. Willard Parker, made a free incision, evacuating a large quantity of flaky pus. (Comp. Med. Sci., July, 1875, p. 207.) Dr. Parker is an advocate for the use of the knife in cases where there is distinct evidence of the formation of pus within the tumor. Dr. Buck, of New York City, a high authority, says, "The proper treatment, which has been successful in my hands, is this: upon ascertaining the existence of the abscess, I, without waiting for fluctuation to establish itself, make an outlet for the matter below the outer half of Poupart's ligament, and parallel with it, first through the integument, exposing

* A professional friend recently related to me a case where a second attack occurred after a lapse of some years. In Dr. Gouley's case, before referred to, there was a recurrence of the disease.

the fascia of the thigh. This fascia being divided, you pass under the ligament, and get behind the iliac fascia. The incision thus made is to be kept open by a plug of lint, renewed every twenty-four hours." (*American Journal of Medical Science*, October, 1866.)

This may well be termed the heroic plan. I hope I may, without being esteemed presumptious, be permitted to pronounce severely against this plan so early in the diseased process. That there is danger in such an operation is certain. On the other hand, one may wait too long when the indications for surgical interference seem plainly indicated. Dr. Bartholow does not favor the use of the knife as commended by Dr. Buck, though it may be necessary in some cases.

Case 2.—J. G., aged thirty-four, coal miner, stout, robust, excellent health, sanguineous temperament, full habits, temperate, industrious. I was called to see him January 14th, 1873, when I learned the following history: He had been about thirty-five miles away from home, at work, during the preceding autumn and winter. Early in December had an attack of what his physician—Prof. D. T. Gilliam, now of Starling Medical College—had called typhlitis, but recovered so far as to be able to resume his work in about three weeks. Not feeling well again, he had started home a few days before I saw him, and had grown rapidly worse.

I found him with considerable fever, pulse 110, full and strong, tongue white, nausea, some emesis, and very severe pain in the right iliac region, where there was a distinct tumor, as large as an orange, very tender. The bowels had been regular until to day, urine free. Diagnosed typhlitis. Gave him morphia hypodermically, which soon moderated the pain, also opium, grs.ij every hour until the pain should be controlled, then to be given as often as pain might indicate its use. Sinapisms and hot stupes over the affected region. Diet to be strictly fluid.

On the 15th I found him comparatively comfortable, but a tendency to a return of the pain whenever the anodyne was omitted for any considerable time; pulse 100, skin moist, tongue dry, coated white, urine not free, no nausea, no appetite; treatment continued. From this date on the inflammation slowly but steadily subsided. No attempt was made to move the bowels until all tenderness had disappeared. This was on the 26th, or thirteen days after the treatment began. He was then given small and often repeated doses of magnesia sulphate, and every six hours a full enema of warm suds. No movement was secured until the 29th, after which there was rapid recovery, under tonics and good diet of a fluid character for a few days. The recovery from the first attack was probably not complete, hence the relapse.

This was purely, in my judgment, a case of typhlitis. The case terminated very favorably, and within a reasonable time, but I now think the bowels might have been moved sooner than they were, with advantage to the patient; also, that a blister over the tumor applied early would have been of great advantage. It is true that a blister interferes to some extent with future inspections of the tumor, but its advantages more than counterbalance this loss. I have found no one topical remedy as effectual, early in the disease, as a large blister, always preferring the blistering collodion to the cerate plaster, if it can be had, as it is less heating and of less weight. To move the bowels, when the proper time arrives for it, sulphate of magnesia, in small, often repeated doses, is far superior to most other remedies, as it softens the fecal matter and renders a semi-fluid stool, which can do little or no harm in passing over the inflamed parts. Castor oil and cathartics of its class are not admissible in these cases, for very apparent reasons.

Case 3.—B. L., aged twenty-two, delicate constitution, tubercular diathesis, very light complexion. Was called to see him in June, 1875. He had had at least two severe attacks previous to this one, while away at college, in one of which his life was despaired of. He was then treated by Prof. Whittaker, of Cincinnati. I found him with very marked systemic disturbance, vomiting, nausea quite constant, pulse 120, weak, temperature 102°, abdomen tympanitic, and very tender in the right iliac fossa, with pain radiating far over to the right side, and up toward the stomach; there was pain in the right hip and thigh; decubitus that of the limbs drawn up and body flexed toward the right. Bowels had already been moved with sulphate of magnesia, the day before, after which he had taken morphia, and applied emollient poultices. I gave him morphia and atropia hypodermically, and opium freely by mouth, also quinia, grains five, every six hours, fluid diet, and milk with brandy, every three to four hours. He seemed to need sustaining right from the start, as he was already prostrated. A very large blister was applied, which filled well, and was kept discharging for some days. He was allowed ice at will, perfect quiet enjoined. The diagnosis was peri-

typhlitis, for the peritoneum was evidently involved to a considerable extent, and the tumor reached low enough to press on the nerves supplying the hip and thigh, hence the pain there. Pain is not as apt to be found in the hip and thigh in typhlitis as in perityphlitis, if my observations have been correct.

For four days this case continued about as above described, the temperature ranging from 102 to 105°, pulse from 120 to 135, at times remittent. The treatment in the main was as above indicated. On the fifth day of my attendance (the sixth from date of attack) I found the temperature 100°, pulse 108, weak, tongue showing signs of cleaning; patient, though greatly prostrated, was feeling more hopeful, and thought he was on the verge of convalescence. As no action of the bowels had been allowed since my first visit, and the tumor and tenderness were now disappearing, I ordered a teaspoonful of sulphate of magnesia every four hours, until it should produce action. The emollients, opium, quinia, stimulants, liquid food, were continued. Less opium was needed, but more stimulants and food. Perfect quiet was enjoined for some days to come. Under the use of these means, modified as the changes in the case demanded, he was able to sit up in another week, and soon recovered. The salts operated on the second day after commencing their use, being aided by an enema of warm suds. The stool was semi-liquid, produced but little pain, and afforded great relief. After this the tumor rapidly disappeared. No pus discharged, as far as observed.

This young man had several light attacks of this affection after this. In the autumn of 1876 he went to Philadelphia, where he entered the Homœopathic College of that city. While there he was severely attacked with this same disease; was treated by the College Faculty; an abscess formed and opened externally. Whether any foreign body was discharged I did not learn, nor did the young man know. When I saw him, a few months later, on his return home, he was greatly broken down, emaciated and anæmic. There was tenderness over the site of the affected region. He moved his headquarters to some point in Colorado, and I never learned his subsequent history as to other attacks.

The cause of the first attack in this case I do not know exactly, but I think it very probable that some hard concretion or foreign body lodged in the folds of the cæcum or appendix, and was not discharged, if at all, until the abscess formed and bursted externally. (It was not opened by any surgeon.) The attacks following the first were excited by any smart jarring, as by horseback riding, or by constipation, or over exertion in any way. Constipation was always ready to light it up, if allowed to exist. It is not improbable that this case might have been brought to a favorable termination in any one of its attacks by allowing it to run to the formation of pus in the tumor and then using the knife judiciously, in order to allow the discharge of any foreign body lodged in the cæcum or appendix. But I do not feel that any one would be justified in permitting suppuration and the dangers growing out of it purposely, in any of these cases, on the mere suspicion that the plan above indicated might be best.

Case 4.—J. C. S., aged twelve years, small for his age, generally well, has had, some years before this, two attacks of pneumonia; otherwise healthy. He was attacked one Friday morning in February, 1880, with severe nausea and vomiting, pain in the stomach and bowels; there was active diarrhœa through the day, for which antacids and anodynes were used quite freely. This was the history I obtained when I saw him, about 10 A.M. His pulse was 120, weak, extremities cold, and there was marked prostration. The anodynes allayed his pain; after several very free evacuations his bowels ceased to act, and he seemed quite comfortable. But for the high fever in the evening, with rapid, feeble pulse, I should have expected but little further trouble in this case, as the lad had eaten heartily at breakfast, and had manifested all the usual symptoms of cholera morbus, and nothing more.

About 8 A.M. the next morning he was attacked with severe and persistent pain in the right iliac region; the pulse was 120, temperature 103°; considerable nausea, great general prostration. The pain was confined to the cæcum, where there was very great tenderness and marked tumefaction. I gave morphia, to allay the pain, and applied a blister of cantharidal collodion. It required the very free use of morphia sulphate to allay the pain. This case continued for eight days before decided convalescence was effected, during which the temperature ranged from 102 to 106°, the pulse from 120 to 140, with frequent severe paroxysms of pain, in spite of the free use of anodynes, blisters and emollients. There were several free evacuations during the second and third day, notwithstanding the use of the morphia. After that the bowels were locked up and there was less suffering from severe pain. The diagnosis was typhlitis, though the continued movements of the

bowels would make it appear that it was inflammation of the appendix. But it must be remembered that the case started out as one of cholera morbus—acute dyspepsia—resulting from overloading the stomach, and this I think sufficiently accounts for the continued action of the bowels. Besides this, the pain did not extend below the cæcum, or well down in the groin, as it is apt to do in attacks of inflammation of the appendix.

The line of treatment was as already indicated in this and the preceding cases. The lad was not permitted to go out of the house for three weeks, was kept on comparatively fluid diet, until the last vestige of tenderness and tumefaction had disappeared. No relapse has occurred in this case, though there were slight indications of it twice afterwards, but absolute rest and strict observance of diet seemed to prevent further trouble. One incident in the subsequent history of this case is, that about eight months after the attack of typhlitis a right inguinal hernia made its appearance. Whether the one had any relation to the other is more than I can say. Probably not. I simply state the fact.

The first cause in this case was probably cold. The day previous to his first illness he had been out for several hours, with other school-boys, with their sleds, coasting, during which he became quite wet, from rolling in the snow. From this he did not feel well on rising. However, he ate a hearty breakfast of hot cakes, butter and molasses, and was attacked with the symptoms before named, followed within twenty-four hours by pretty well defined symptoms of typhlitis.

Case 5.—Miss G., aged eighteen, nervo-sanguineous temperament, generally in excellent health. I was called June 4th, 1881. I learned that she had been house cleaning, and doing unusually heavy lifting the three preceding days, and while lifting felt sharp pain in right iliac region, but did not complain at the time. Had gone to bed the night before seemingly as well as usual, but about 4 A.M. roused the family, on account of severe pain in the stomach and bowels. The trouble increased until I saw her, at 10 A.M. June 5th. I found excessive nausea and vomiting of bitter, greenish fluid, severe pain, referred to the stomach, but some pain all over abdomen, very tender to pressure, pulse feeble and very rapid, severe headache, pupils dilated; bowels had been moved the day before.

Treatment.— Morphia sulphate, grs. ¼ every half hour until relieved. Cerium oxalate, grs. iij as often as nausea required it. Large sinapism over the abdomen.

June 6th, 10 A.M. Pain and nausea relieved in two hours after my visit, but there is tenderness in the right iliac region, which her mother thought was due to approaching menses. Temperature 99°, pulse 96, tongue pointed, furred, white, edges and tip very red, and no appetite. Treatment continued, and added sulphate magnesia, ℥iv every four hours until operation is secured.

June 7th. Condition quite the same, but seemingly less tenderness and some amelioration of symptoms.

June 8th, patient spent the day before quietly, until 7 P.M., when she had a severe paroxysm of pain in the right side, which the mother relieved with the morphia prescribed at first. This morning pain returned. I saw her at 10 A.M. Temperature 101°, pulse 120, feeble, pupils dilated, some nausea, severe and persistent pain in right iliac region, very tender, tumefaction extending over a large space, reaching along the course of the colon; also much pain in right hip and inner face of right thigh; decubitus very distinctive. The salts had operated the day before; kidneys had acted freely; menses not present. Diagnosis, perityphlitis. Treatment: morphia, gr. ss at first, and one fourth grain every half hour until easy, then every two hours regularly until fully under its influence. Large blister over the affected portion, nourishment strictly fluid, ice and water *ad libitum*.

At 6 P. M., temperature 102°, pulse 124; there is very marked prostration; no food taken; there is less pain, by far, but very great tenderness. Treatment same, but added quinia sulphate, grains two, every four hours. These symptoms continued with little abatement, and demanding a full dose of morphia every two to three hours, until the 13th inst. The pulse ranged from 120 to 135, temperature from 101 to 104°. No new symptom appeared during this time, except the menstrual discharge appeared on the 9th. On the 14th I found the pulse 100, temperature 99°; tongue cleaving; a little desire for food; decidedly less tenderness and tumefaction; general appearance indicated approaching convalescence. Treatment: morphia as needed, to meet even slight pain whenever required; quinia continued, also warm, moist hop bag, which had been steadily used after 8th inst., placing it over the dressing of the blister. I now also add magnesia sulphate, ℥j, every four hours until movement is secured. Throughout the entire management of this case perfect rest was enjoined, and

the diet was two ounces of milk every three hours, and of the best *beef essence*, one ounce, in lieu of the milk. On the 16th had a free passage following an enema of warm suds. Some pain while over the stool, but none afterward. I now ordered the quinia continued, nourishment to be largely increased, but strictly fluid, for at least ten days, also to attempt no movement within that time other than simply slipping into a large easy chair at the bedside to relieve the irksomeness of lying so long. From this date on there has been steady improvement. There was, however, on the 16th, still a distinct tumor, as large as a common hen egg, tender on pressure, which gradually subsided. These cases are few in number, but as far as they go they teach us that—

1. These diseases may result from apparently slight causes.

2. They are very liable to a recurrence of attack.

3. There is marked tendency to suppuration and fecal fistula when the peritoneum and cellular tissue are involved.

4. Operative interference is seldom required in early and well treated cases.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY FRANCIS DELAFIELD, M.D.,

Adjunct Professor of Pathology and Practical Medicine.

Diabetes Mellitus.

Gentlemen:—This man, aged about 53 years, tells us that he has not been feeling well for some time, although he used to have good health; and about Christmas he began to feel so ill that he consulted a physician. He has lost some flesh, although he is rather a fleshy man yet. He has great thirst, and at one time he passed about six quarts of urine in the twenty-four hours, and he thinks that now he passes about four quarts. The doctor whom he consulted, about Christmas, examined his urine and said that he had diabetes. He gave him a medicine which he does not know the name of, and told him to eat Graham bread, or rather the gluten bread manufactured by the Health Food Company of this city; and he also told him not to use any sugar. These instructions the patient says he has carried out.

On examining his urine now, with Fehling's solution, you see it gives the characteristic reaction for sugar very well indeed. There is a precipitation, of the sub-oxide of copper on boiling the urine with Fehling's solution. I should judge, roughly, from this, that there is a considerable amount of sugar in proportion to the amount of urine, and he is passing about four quarts of urine in the twenty-four hours.

This man is a very good sample, then, of a common enough set of cases of diabetes, under the general name of diabetes, or diabetes mellitus—people who pass an increased amount of urine with sugar in it. You will find in practice that there is a very great difference in different cases; that merely calling them diabetes tells you what the disease is, but it does not tell you at all what the result is likely to be. There are some cases of diabetes which do very badly indeed; in which telling the patients that they have diabetes is equivalent to telling them that they have a disease which will go on and prove fatal within a moderate length of time. There are other cases of diabetes in which telling the patients that they have diabetes means that they have something from which they will recover, and recover permanently. And then, between these two extremes there are all sorts of gradations. The disease runs very differently indeed in different cases. Why this is we are utterly ignorant. Our ignorance depending, of course, principally upon our ignorance of the real nature of the disease. The symptoms of the disease and its course we are well enough acquainted with, from experience, but what is the real nature of the disease we do not know.

Now, this man is a good example of the cases which do pretty well. His chances are very good indeed. He is likely either to get well or to get so much better that his disease will not do an injury to him. When you have men of about the age that this man is, men who, when they come to you, have already been suffering from the symptoms of diabetes for a number of months, and you find that their general condition is good, as this man's is, that they are well nourished, have a good appetite and feel well, the mere fact of their passing a large amount of water, and of this water containing a good deal of sugar, and the mere fact of their feeling thirsty in addition, does not necessarily indicate the presence of a very grave disease. A very large number of these cases do well, and they do well under a variety of plans of treatment. A certain number of these cases do well simply on the regular diabetic diet—a cutting off from the food all sugars and all starches. Other cases do well on the use of bicarbonate of soda in large doses; others do well on the use of the salicylate of soda; others do well on the sulphide of calcium; others do well on opium and arsenic. These are the cases which do well under a very great variety of plans of treatment; sometimes one plan answers best, sometimes another. In this particular case I should be disposed to use the sulphide of calcium. This drug has the advantage that it can be given in small doses, the bulk of the drug at each dose being quite small, and it answers very well indeed in a certain number of cases of diabetes of this particular kind. You can give the sulphide of calcium either in pill or in solution. It is perhaps as easily administered in the form of pill as any other way, and it may be given at first in doses of a tenth of a grain three times a day, after meals; then you begin gradually to increase it, rising from a tenth of a grain three times a day to a fifth of a grain three times a day, and continue to increase the quantity until your patient shall take three or four grains in the day, which is as high as you will usually have to go.

While the patient is doing this his diet should be restricted, but it is not necessary to restrict it to a very great extent; it is not necessary to put him upon the complete diabetic diet. He should eat meat, a certain number of vegetables and fruits, but he should avoid sugar in every form, and also starch as far as possible, except in the shape of bread. The use or the disuse of wheaten bread by these patients should depend very much upon how well they like Graham or gluten bread. For most people gluten bread is one of the most disgusting things. They not only do not like to take it, but it is very apt indeed to interfere with their appetite for other articles of food, so that you should always be careful about how you insist upon the use of gluten bread. If the patient dislikes it very much, and if it interferes with the appetite for other food, then you can be quite sure that you will do more harm than good by insisting on his taking it. The same is true of the bran bread and of the Graham bread. You will find a certain number of patients who will not be satisfied unless they be allowed to eat some ordinary white bread, and in these patients, even though the bread does contain some starch and the starch contain sugar, yet you will find, taking all together, they will do a great deal better than if you cut off entirely the white bread.

I would advise this man, then, to make his diet on meat, with a moderate amount of fruits and vegetables; to eat no sugar at all in any form; not to eat wheaten flour at all, except in a form and in such quantity as is necessary to make him comfortable, and if he is just as well satisfied with gluten or Graham bread as with white, so much the better. Then to use the sulphide of calcium, continuing it a long time, increasing the amount gradually.

Aortic Stenosis.

Case 2.—This man, gentlemen, is over fifty years old, and he tells us that for the last year he has suffered from very uncomfortable attacks following exertion; attacks of oppression, of smothering, a feeling as if he would die. These attacks have been much worse lately, so that he has not been able to work.

On examining the heart I find that it is enlarged, that this enlargement is accompanied by a circumscribed apex beat, but the apex beat is not very forcible. The pulsation in the large arteries is more forcible than the pulsation given by the heart itself. On listening over the heart I hear a double murmur at the base of the heart, which is transmitted down the sternum. The man, of course, is suffering from organic heart disease. What is its nature? "Aortic regurgitation and stenosis." Yes, sir; there is undoubtedly a change of the aortic valve, and that change is of the nature of a stenosis and insufficiency, and it is producing a very decided effect upon the general circulation of this man. The effect, so far, seems to be more upon the arterial than upon the venous circulation. His color is fair, he has had no œdema of the feet, he has a little cough with expectoration, but not a great amount, so that the lungs are apparently not much affected, and the effect of the cardiac lesion so far seems to be only upon the functions of the heart itself and upon the condition of the arteries. There is, I imagine, some dilatation of the large arteries, of the axillary and of the carotid arteries, and I presume also some general diffuse dilatation of the arch of the aorta.

This case will be more benefited by the use of the iodide of potash than by anything else. He should take iodide of potash in ten grain doses three times a day; he should be advised not to exert himself forcibly at anything. It is quite possible that the use of the iodide of potash, if it be kept up some time, may improve the relationship between the tension of the blood in the heart and the tension of the blood in the arteries, and when this is effected the man will be more comfortable than he is now. (The patient was sent out.) But that is a case in which the prognosis is bad; that man is pretty sure to continue to get worse, and I imagine that he will continue to get worse pretty fast now. I should suppose that the lesion of the aortic valve was already a very decided one; that the stenosis was already very marked, and that the probabilities are that the man will continue to get worse much faster than he has already done. The symptoms of disturbance of the venous circulation will probably very soon be added to his other symptoms, and then his condition will be much worse.

Mitral Insufficiency.

Case 3.—This next patient, gentlemen, a little girl five years old, the mother tells us, had an attack of rheumatism in June, two years ago, which lasted for four weeks. In the following December she had a cough, for which she called in a doctor, and he detected, in his examination, a loud sound over the heart. This sound the mother heard after her attention had been called to it by the physician. It is only on account of this sound, which the mother fears is connected with some serious heart affection, that the child is brought here to day. The mother says she is well, has a good appetite, and is very active, never quiet except when asleep.

On examining the heart it does not seem to be enlarged; the apex is in about its natural position, and the heart is beating very regularly and steadily, and about as forcibly as it ought, but there is a feeling of a thrill communicated to the finger at the impulse of the heart, and the thrill can be felt over most of the præcordial region. I hear a loud systolic murmur, which is transmitted into the arteries of the neck, but which is heard loudest over the apex of the heart. It has that peculiar character which is called musical; it is not the ordinary blowing murmur, but a loud murmur of a musical character, and that is why the mother has heard it, for musical murmurs are always heard more distinctly than other murmurs.

The murmur indicates a lesion in the mitral valve, probably an insufficiency, but it is an insufficiency which does not seem to disturb the general functions of the heart. The heart seems to work just about as well as if the valve were normal. Such cases of organic disease of the heart we meet with from time to time; cases in which there is technically a structural lesion of the valve, and yet the lesion does not seem to interfere with the natural functions of the heart, and that, I think, is the case with this girl. She

is really not very much worse off for having the insufficiency of the mitral valve than if she did not have it, and I do not know that there is any way in which we can improve her condition. Of course, we cannot make the mitral valve sufficient.

Thrombosis of the Axillary.

CASE 4.—This woman, gentlemen, is about forty years old, and she says she was in good health, with the exception of suffering from some bronchitis, up to eight weeks ago. At that time she noticed that the left arm was a little larger than the right arm, and of a little darker color. It continued in this condition, without changing much, for three weeks; then, five weeks ago, the left arm became suddenly very much swollen. When she woke up in the morning she found the left arm a good deal swollen, and not only the left arm, but also the left shoulder. It was of a dark color, and the superficial veins were enlarged. This state of things has continued up to the present time, only that it is not so marked now as it was at first. She also tells us that at the time of this accident, five weeks ago, she suffered from a little pain referred to the upper part of the sternum, and she felt a slight feeling of oppression. On examining her, we find that the lungs are normal, the breathing is good all over both lungs; we find that in front the percussion resonance is normal, and that it is normal behind, with the exception of a little dullness over the left lung. We find nothing wrong with the heart, excepting a not very loud murmur occurring with the first sound at the base.

Now, what is the matter with this woman? "Phlebitis of the axillary vein." When you say phlebitis, what do you mean? "Some inflammation and obstruction of the vein." Do you mean that there has been both inflammation and obstruction? "Yes sir." Well, there has been obstruction, at any rate. I think it would be safe to be satisfied with saying that there is obstruction, and leave out the inflammatory part. I think she has been, and is now, suffering from thrombosis of the axillary vein on the left side. Thrombosis of this particular vein is a very rare condition indeed. Thrombosis of the large veins, without any inflammation of the veins, or other fact in the patient's general condition to account for it, is not a very uncommon condition; we see it not unfrequently, but the veins in which we see it most frequently are the femorals, and in people over fifty it is one of the diseases which you may expect to meet with from time to time—an idiopathic thrombosis of one or both of the femoral veins. It may also occur in the veins of the neck, but it very rarely indeed occurs in the axillary vein.

The prognosis of this condition is usually good; the obstruction in the vein produces symptoms of venous congestion which last for a considerable length of time, and then gradually diminish, getting less and less, until the affected part of the body returns nearly to a natural condition. The most important part of the treatment consists in bandaging, if possible, the part of the body which is the seat of the venous congestion. In this case the arm and the shoulder should be kept steadily bandaged with a flannel bandage all the time. If the thrombus affect the femoral vein, you should do the same thing with the leg; keep the whole leg and thigh bandaged constantly. There is no particular use in giving medicine unless you happen to believe that the bromide of ammonium has the effect of absorbing blood clots. If you do believe this, then, in addition to the bandaging, you can put the patient upon the use of the bromide of ammonium; but in any case you may be pretty sure that the patient will gradually get better and better, until he returns to a normal, or very nearly normal condition.

Carcinoma of the Œsophagus.

CASE 5.—This man tells us that he is about forty-eight years old, that he belongs to the army, and that his health was good until about six months ago. At that time he was taken suddenly with an attack of vomiting and purging, which only lasted for a short time but which seemed to mark the commencement of his illness. Since that time he has not felt well; he has lost flesh and strength, and his general condition has become depreciated. The only positive symptoms which he complains of are pain and soreness about the thorax and a certain difficulty in swallowing. He has had this pain in a greater or less degree throughout the whole course of his illness; it came on early and has lasted ever since. The pain which he had at first he describes as very severe, and he refers it to the left side of the thorax; the pain which he has now is not so severe; it comes on occasionally, and he refers it to the median line, from which point it radiates to the right side of the chest. Besides this pain he also complains of a feeling as if there were a lump or a ball, which keeps rising into his throat and causes him to attempt to swallow. He also has difficulty in swallowing solid food. He continues to eat solid food, but he swallows it with difficulty, and he feels that he has to take some liquid food afterward to get the solid food down. Then, more recently, he has developed a hoarseness, which you notice in his voice, but he has no cough.

When we make a physical examination we can make out nothing wrong about the heart or lungs, and we find nothing wrong in the abdominal cavity. An œsophageal bougie of moderate size can be passed into the stomach, but it gives rise to a good deal of pain; greater pain than it would cause in a healthy person. Although when you pass a bougie of that size into the stomach of a healthy person, he may very often complain, and perhaps vomit, yet it is evident that this man has suffered an unusual amount of pain, and the pain has lasted afterward. The man looks as if he were somewhat emaciated, but he still has a fair amount of flesh. You cannot say that he is cachectic; his color is very good, and he is still able to take a moderate amount of food. He denies specific history altogether.

Those seem to be all the data we have for a diagnosis in this case. What is the matter with the man? "Carcinoma of the lower portion of the œsophagus." That would be one of the first things to think of. It is possible enough that that may be the disease from which he is suffering; still, it is not a straightforward history of carcinoma of the œsophagus. Could it be any-

thing else? "A mediastinal tumor pressing upon the œsophagus." Yes, I suppose the diagnosis would lie between those two conditions. There is still a third condition which we cannot quite exclude, and that is aneurism of the aorta. I should think the diagnosis lay between those three conditions—aneurism of the aorta, a tumor developed in the mediastinum, and a new growth of the wall of the œsophagus. The man ought to be rather worse than he is now for a carcinoma of the œsophagus existing for six months, for if we took his history as it is given, we would have to believe that the cancer had existed before that time. Of course, the attack of vomiting and purging that he had was to some extent, probably, an accident; it had no real connection with the disease itself. But from that time, six months ago, he has had all the symptoms mentioned; the pain had already begun, and it was a very intense pain, so that you would have to suppose, if it were cancer of the œsophagus, that it had existed longer than six months; seven or eight months. But we would expect that a cancer of seven or eight months' duration would have produced greater effects upon the man's general condition than he shows. He ought to be unable, by this time, to swallow any solid food at all, and he ought already to be fairly cachectic. Then, the pain which he has had is not the sort of pain that we are accustomed to get in cancer of the œsophagus. The pain of cancer of the œsophagus is usually referred to the upper end of the sternum. Sometimes patients have the pain all the time; sometimes it is excited only by swallowing; but they usually refer it to the upper part of the sternum. In this man the pain at first was very severe, and it was referred to the left side of the thorax; but now, when he ought to be having more pain, he is having less pain, and when he swallows it only gives him discomfort. These facts do not accord with the natural history of cancer of the œsophagus. Then we have still another symptom which does not belong to cancer of the œsophagus, unless the cancer be situated pretty high up, and that is hoarseness. His hoarseness, of course, must depend upon one of two causes, either an actual inflammation of the larynx itself, or else an affection of the nerves which supply the larynx. He either must have laryngitis or ulceration of the larynx, or else there must be something affecting the recurrent laryngeal nerve. Therefore, although it is possible that he has cancer of the œsophagus, and although I would by no means exclude that from the diagnosis, yet, if he has, it does not give the ordinary history of cancer; the case is an irregular one. On the other hand, it would be a very irregular history for aneurism of the aorta; but there are some aneurisms, which are given off from the posterior portion of the transverse part of the arch of the aorta, which do behave very queerly indeed. They are so small that they give no physical signs, and the only effects which they produce are pressure effects. These aneurisms are sometimes accompanied by a great deal of pain, they are sometimes accompanied by a difficulty in swallowing, and they are sometimes accompanied by a hoarseness such as we have here. Then, again, a tumor developed in the mediastinum, pressing upon the œsophagus and upon the recurrent laryngeal nerve, would account for the phenomena that we have here. In fact, his condition and his history would be compatible with either of these three conditions, and yet, it is not a characteristic or straightforward history of either of the three. I do not think we have really the material for making a positive diagnosis. I should be unwilling to say decidedly which of these three conditions the man has. I suppose as a mere matter of probability it would be likely to turn out to be cancer of the œsophagus, although the history is so irregular.

Lead Poisoning—Myelitis.

Case 6.—You hear this man's history, gentlemen; he is twenty-five years old; a carriage painter by occupation; he has been sick all winter; at first he was very much troubled with cramps in the stomach, and to such an extent that he was sick abed a while. After that his cramps got better, but now he is troubled with pains which he refers especially to the arms and legs. These pains are sometimes apparently in the joints, sometimes they run up and down the arms and legs. There is no difficulty, however, in moving the joints. Besides these pains he has lost flesh and strength. There is now very decided loss of power in both arms. He uses very little force indeed in trying to compress my hand, and there is also decided loss of power in the legs. He has to walk with care. There has not only been a loss of power in the muscles, but there has also been a wasting of them, a certain atrophy of them. Then, again, when I pinch the muscles of the arm or leg they show an unnatural tenderness, and they are unnaturally irritable, and when the skin is exposed there is a disposition of the muscles to contract, simply from the stimulus of the air.

On looking at the man's mouth I find that along the edge of the gums there is a tolerably distinct blue line. That, then, makes the man's history. The fact that he has been a carriage painter by occupation, the existence of a blue line along the gums at the present time, and this history of cramps, pains and loss of muscular power, ought certainly to suggest to you a particular disease. Then, what is the matter with the man? "Lead poisoning." Well, is this a very ordinary history of lead poisoning? If you did not know that he was a carriage painter, and that there was a blue line along the gums, would you think he was suffering from lead poisoning, or what would you think he was suffering from? "Myelitis of the anterior gray cornua of the spinal cord." That would be compatible with the loss of power, with the pain, and with the wasting of the muscles, and that, quite probably, would be the disease from which he was suffering; but there might be an additional part of the spinal cord involved. It would not be exactly a straightforward history; but the symptoms are so well marked that you might well suppose that in addition to the lesion of the anterior gray cornua there was a lesion of the lateral columns of the cord. That would be the diagnosis were there no history of lead poisoning. It would be possible for him to have all of these

symptoms which he has given as a result of chronic lead poisoning, but it would be an uncommon occurrence. The cases of lead poisoning that we get in New York do not usually go on to such a general loss of muscular power of both arms and both legs, and such a wasting of the muscles, as is evident in this man. Still, it is possible to meet with such cases.

There would be no reason why the man should not be suffering at the same time from lead poisoning and myelitis of the anterior horns, and I should think that that is probable in this case; that he has really been suffering from two conditions coming on at the same period of time; that he has been suffering from lead poisoning, and in addition to this, from an attack of myelitis of the anterior gray cornua. The combination of these two conditions would explain his symptoms more perfectly than either of the two separately. Whether the myelitis could be considered as due to the lead poisoning or not, we could not, of course, say. We practically know nothing about the causation of myelitis of the anterior gray horns, and it is just as probable that such a myelitis may be caused by lead poisoning as that it may not. We have no knowledge one way or the other.

Whatever may be his trouble, he is getting better at the present time, under the use of the iodide of potash, and as long as he continues to improve I think it will be proper to continue that treatment. But he looks as if he would very soon require the use of iron in addition, and if the improvement should not be rapid, I think it would be proper to stop the use of the iodide for a time, and to put him upon the use of sulphuric acid, and after having been on that for a time, he might again return to the iodide.

Editorial Department.

Periscope.

Treatment of the Diarrhœa of Phthisis.

In the *Lancet*, June 18th, 1881, Dr. C. Theodore Williams says, speaking of the peculiar diarrhœa of phthisis, that, arising from ulceration, it requires very careful attention. The great point to be kept in view is the healing of the ulcers, and this can only be attained by shielding them from all irritable substances, and by promoting a healthy granulating action. The treatment, in fact, resolves itself into three sets of measures.

1st. Rest in bed and the administration of only such food as can be quickly and easily assimilated without causing much distention of the intestine, or accumulation of flatus. Such are chicken broth, beef and veal tea, milk gruel, blanc mange, always combined with liquor pancreaticus, and prepared after the admirable methods of Dr. William Roberts of Manchester. Dr. Jagielski recommends koumiss specially in these cases.

2d. Warm applications to the abdomen, in the form of linseed poultices, turpentine stupes, or hot water fomentations, to reduce the pain and promote a certain degree of derivation to the skin. If the pain be severe, I have found the application of a small blister over the area of tenderness on pressure, as recommended by Dr. J. E. Pollock, very advantageous. I have noticed, in some obstinate cases, that when the blister has risen, the diarrhœa has been considerably reduced, and pain existing in the abdomen at the same time has subsided.

3d. Internal medicines. When we have reason to believe that the ulceration is slight and confined to the small intestine, the diarrhœa may be treated by bismuth and opium, or by some astringents. The liquor bismuthi et ammoniæ citratis (B. P.) is a convenient form, but not always so effective as the powdered carbonate or the nitrate of bismuth in ten to twenty grain doses. Dover's powder combined with it in ten-grain doses is often effective. The most powerful astringent is the sulphate of copper in a quarter to half grain doses, combined with half a grain to a grain of solid opium. Of the various vegetable astringents I have found tannic acid in four-grain doses to answer best, far better than rhatany and catechu, but in all cases I combine it with a certain amount of opium, to reduce the irritability of the ulcers. Indian bael, especially a preparation of the fresh fruit, is often efficacious in checking the diarrhœa if the ulceration be limited. If, however, the ulceration attack the large intestine as well as the small, it is obvious that more local treatment is advisable, and recourse should be had to injections or suppositories. The enema opii (B. P.) administered twice a day is sometimes sufficient, and may be strengthened by the addition of acetate of lead, four grains to an injection, or of tannic acid, five grains. This is a small injection, and it is doubtful how far its local effect reaches. Where the ulceration is very extensive, and involves the greater part of the large intestine, an attempt ought to be made to apply the remedies more thoroughly to the mucous membrane; and for this purpose injections of larger amount—from a pint to a pint and a half—may be used, consisting of gruel or of starch, or, best of all, of linseed tea, and all containing a certain quantity of opium (thirty to forty minims of the tincture). I would specially recommend the linseed tea, as it appears to exercise the same beneficial effect on the ulcers of the large intestine as it does in follicular ulceration of the throat. One of the most obstinate cases of intestinal tubercular ulceration I ever witnessed yielded to linseed tea injections, after almost every other treatment had been vainly tried, the ulcers apparently healing, the diarrhœa ceasing, and the patient living for two years afterward, and dying of pulmonary lesions. In cases where the stools are very fetid, I have added glycerine of carbolic acid to the injection

with advantage. In many cases, however, it is desirable to give the large intestine as much rest as possible, and not to stretch the ulcerated mucous membrane through any distention by fluids; in these cases suppositories of morphia (from half a grain to a grain), or of the compound lead one, or of those of tannic acid, are indicated, and the treatment of the diarrhœa arising from lardaceous degeneration of the intestine is not very hopeful. Where the very channels of assimilation—viz: the villi—have undergone degeneration, as well as the various structures from which the succus entericus is poured out, it is difficult to see how treatment can restore the lost tissues. Dr. Dickinson's researches show that the loss of alkali is the chief characteristic of the disease. Dr. Marcet's analyses show that the chief chemical feature is deficiency of phosphoric acid and potash, and excess of soda and chlorine, and on this principle we should give phosphate of potash. When, however, the disease has so far advanced as to reach the intestine, it may be considered beyond any effective general treatment. We must be content to restrain the diarrhœa if we can, by astringents, the more powerful the better. Tannic acid in from two to four-grain doses, with dilute sulphuric acid, sulphate of copper or sulphate of zinc are the most useful, and injections of these substances do some good.

Action of Coffee and Sugar on the Stomach.

In a paper presented to the Société de Biologie (*Rev. Méd.*, May 14), M. Leven states that coffee, so far, as is often supposed, from accelerating the digestive process of the stomach, rather tends to impede this. When thirty grams of coffee, diluted in 150 of water, is given to a dog, which is killed five hours and a half afterward, the stomach is found pale, its mucous surface being anæmic, and the vessels of its external membrane contracted. The whole organ exhibits a marked appearance of anæmia. Coffee thus determining anæmia of the mucous membrane, preventing rather than favoring vascular congestion, and opposing rather than facilitating the secretion of gastric juice, how comes it that the sense of comfort is procured for so many people who are accustomed to take coffee after a meal? A repast, in fact, produces, in those whose digestion is torpid, a heaviness of the intellectual faculties and embarrassment of the power of thinking; and these effects, and the disturbance of the head, are promptly dissipated by the stimulant effect which the coffee produces on the nervous centres, as shown by experiments with cafein. Coffee and tea, when taken in excess, are a frequent cause of dyspepsia, for the anæmic condition of the mucous membrane being periodically renewed, a permanent state of congestion is at last produced, which constitutes dyspepsia. Sugar, which with many doctors has a bad reputation, is an excellent aliment which assists digestion, and should not be proscribed in dyspepsia. By experiment, digestion of meat is found to take place much more completely when sugar is added. Coffee exerts both a local and general action, operating locally by means of its tannin, by diminishing the calibre of the vessels, but acting on the general economy by exciting the nervous centres and the muscular system. It renders digestion slower, and is only of good effect by relieving the feeling of torpor after meals. Its injurious action on digestion may be corrected by adding sugar so as to counterbalance its effects on the mucous membrane. This adding sugar to coffee is not only a pleasant practice, but one contributing to digestion.

Treatment of Acute Metritis.

In the course of an article in the *Virginia Medical Monthly*, January, 1884, Dr. Joseph Warren writes:—

When metritis becomes complicated, it may involve the ovaries and broad ligaments, and become pelvic peritonitis, perimetric phlegmonous lymphangitis, phlegmasia dolens. These all may arise from a cold, from suppressed menstruation, tumors, cancerous and tuberculous affections, and from sudden shocks to the nervous system by sea-bathing, accidents, railroad injuries, etc. In the treatment of acute metritis, we should pursue the most mild antiphlogistic method in the early stages. Disinfectants, such as a solution of chloride of zinc, one part to thirty of warm water, or carbolic acid, ten to thirty per cent. in glycerine, with one or two grains of sulphate of morphia to each quart of water, are called for in all puerperal diseases, and wherever septic poisons are introduced. Flaxseed tea will also be found very useful and soothing. Spongiopilin, wet in hot water, having half a drachm or more of the fluid extract of belladonna to enough hot water to thoroughly wet it, to which tinctura opii may be added, if the pain is very acute and distressing, may be applied to the abdomen with benefit. A dozen leeches, or more, applied just above the pubes, will often give great relief. A suppository of belladonna, hydrated chloral, morphine made with cocoa butter, may be inserted after each injection of the above named mixture. This, with rest in bed, and the administration of the following internal remedies, will generally be found very efficacious in relieving the first acute and engorged state of acute metritis:—

℞.	Chloral hydrat.,	ʒ iij
	Chloral croton,	gr. xxx
	Liq. opii comp.,	ʒ vj
	Glycerine,	ʒ ij
	Syr. tolu,	ʒ j. M.

Sig.—A teaspoonful every hour until ease from pain and sleep be induced.

If vomiting occurs, which is almost always an accompaniment, I would add to the above mixture, in place of the croton chloral, bromide of potassium, and a solution of sulphate of morphia for the liquor opii compositus. Should the patient reject everything by the stomach, I would throw up into the rectum an enema of starch-water and a drachm of tincture of opium. This, with the exclusion of all noise and excitement, will be, in accordance with my experience, the best treatment for the first twenty-four or forty-eight hours. After this, if the stomach will tolerate it, I would give opium and hydrargyri chloridum mite—half grain of opium and two of calomel—once in four or five hours. I would

follow this, after one day, with bisulphate of quinia, in two to five grain doses. If the patient will not bear opium, I would give extract of hyoscyamus—hyoscyamus and camphor, with or without the chloral. Bromide of ammonium, ten grains to the drachm, in hot water, is also very useful in these cases.

Treatment of Dysmenorrhœa.

Dr. G. W. Moss, of Paris, Mo., gives the following treatment of Dysmenorrhœa in the St. Louis *Courier of Medicine and Collateral Sciences*, for June, 1881:—

If called upon to prescribe for a patient in the midst of her suffering, if the menstrual flow has not begun, or is scant in quantity, I usually direct warm stimulating drinks, such as ginger, spice, or clove tea, the warm foot or hip bath. If the extremities are cold, with chilly sensations over the body, the patient is to be put to bed with hot bricks or bottles of hot water to the feet and about the loins. If the bowels are constipated, give purgatives, usually calomel and rhubarb, or the compound cathartic pills. If the patient is plethoric, with flushed face and some excitement in the circulation, saline cathartics are preferable.

If the flow is still tardy or scant, assist the purgatives with copious injections of warm water. These failing to bring relief, I give compound spirits of ether, tincture hyoscyamus, spirits of camphor, each a half to one drachm, to be repeated, if necessary, until the flow becomes free enough. If the pain still continues, or is of a spasmodic character, the pulse rather weak, I find nothing better than ten to fifteen drops of aromatic spirits of ammonia, at the same time using as an injection into the rectum—

℞.	Chloral hydrate,	grs. xx–xl	
	Bromide potassium,	grs. xl–lx	
	Tincture belladonna,	gtt. xx	
	Water,	℥ iij–iv.	M.

And to this I frequently add tincture of assafœtida, or 30 to 40 drops of tincture of opium instead of the belladonna; and this prescription I have scarcely ever known to fail to give relief and rest to the patient.

Sometimes I use the hypodermic injection of morphia, but I am not partial to this mode of medication. If the patient is anæmic, and the pains of a neuralgic character, I have frequently found ten grains sulphate quinine, with one-fourth to one-third grain morphine, repeated two or three times, if necessary, to give more prompt relief, and to be more permanent in its effects than any other remedies. Vaginal injections of warm water, sometimes with the addition of laudanum and belladonna, are soothing and grateful to the patient.

This outline of treatment, varied, of course, to meet particular symptoms and individual peculiarities, I regard as applicable to all the forms of dysmenorrhea during the period of the menstrual flow.

During the intermenstrual period the treatment is directed with reference to the general condition of the patient. If she is anæmic or neuralgic, iron, with other tonics, is given, a favorite prescription, in the beginning, being the well known compound of blue mass, iron and quinine, with the view of equalizing the circulation, regulating the bowels and restoring secretions. Afterwards quinine, iron and strychnia, or nux vomica, warm baths, with friction to the skin frequently, flannel next the skin, and plenty of exercise in the open air, and this last not the least in my estimation.

In the plethoric the blood is as much at fault as in the anæmic, and for the purpose of reducing that fullness of habit, counteracting the tendency to local congestions and correcting the morbid condition of the blood, I know of no better treatment than an alterative course of mercury, followed by saline purgatives, with warm baths, frictions, open air exercise and plain diet. If the patient is of a rheumatic or gouty diathesis, I have found no remedy superior to that of Dr. Dewees, fifty years ago, or more, and that is colchicum and guaiacum.

The prescription of Dr. Fenner, of New Orleans, in nearly all dysmenorrhœal cases, and one that I have frequently used myself with good results, is—

℞.	Gum guaiacum,	℥ iv	
	Canada balsam,	℥ iv	
	Oil sassafras,	℥ j	
	Hydrarg. chlorid. cor.,	gr. x	
	Rectified spirit,	℥ iv.	M.

Of this is to be given ten or thirty drops, night and morning, commencing a day or two before the flow is freely established.

The Therapeutical Indications of Bromide of Ammonium.

Dr. E. Halsey Wood, of Hersey, Mich., in a communication to the *Michigan Medical News*, April 25th, 1881, first draws attention to the fact that most authorities, when referring to the bromides, are thinking only of the potassium salt, and regard the effect of the different bromides as analogous. After showing this to be an error, he says:—

The following are the symptoms which I have found to indicate the use of the bromide of ammonium: Frontal headache, suffusion and blurring of the eyes (asthenopia), soreness of the upper lids, ptosis or convulsive closure of the eyes due to paresis of levatores palpebrarum, a sense of swollenness or bulging in the eyes (exophthalmos), a wavering dilatation of the pupil, injected and icteroid conjunctivæ, excessive sweating, sleeplessness, disagreeable dreams (phantasmagoria), anorexia, nausea, vomiting and retching, stiffness of fingers, numbness, swollenness, and sweating of hands, blue or other abnormal color under nails, capillary congestion of hands, pain in nape of neck running up into the occiput, pain in shoulders, elbows, and knees, pain at sacro-spinal junction (lame back), a sense of weariness (muscular debility) or pain, or pain with spasm (cramps) in the calves of legs, pain between shoulders and under scapulæ, any degree of coolness of hands or feet appreciable by the normal sense of caloric, œdema of feet and ankles, congestive, intestinal, uterine, renal, gastric, and pulmonic hemor-

rhages, despondency and irascibility, lassitude, languor, listlessness or weariness, hyperthermy and hypothermy, hot flushes and cold chills, hopelessness (acute formapathy), drowsiness in the daytime, atonic voice, tinnitus aurium due to congestion of the labyrinth, pulse slow or thready, a sense of chilliness, and a sense of constriction around the chest.

In the same journal, May 10th, he relates several cases illustrative of its value in the treatment of cholera. He employs it in full doses frequently repeated (adults gr. xx, every five minutes), according to the urgency of the case. As to the *modus operandi*, he says:—

The remedy acts as a sthenic; it energizes the ganglia and restores innervation, and all the evidences of deranged function disappear under its influence. It is as specific in the mild as it is in the severe degree of gangliasthenia, and thus not only exhibits its potency but proves that the shape of disease assumed is due to different degrees of the same condition.

Inoculation of both Eyes, for Pannus.

The following case is reported in the New York *Medical Record*, July 2, 1881, by E. S. Peck, M.D., from notes furnished by Dr. Sturs:

John Smith, aged twenty-one years, single, born in the United States, worker in varnish, entered the eye ward of Charity Hospital, Blackwell's Island, October 18, 1880.

History.—Patient came to hospital suffering from trachomatous pannus in both eyes; duration in the right eye four years, in the left eleven years. He attributes this trouble to use of dirty towels at an orphan asylum in which he passed a portion of his boyhood. On admission, patient could merely make his way around the ward; sight of right eye was better than that of left. Patient was ordered to bed, with constant application of hot compresses night and day; also a solution of nitrate of silver, gr. xx, ad aq. ℥j. twice daily to the inner lid surfaces and cornea.

November 30th. Condition improved as to pain, tumefaction, and infiltration of lids, but no improvement in vision.

December 4th. Treatment by inoculation was resorted to. First experiment: Pus was taken from a long suppurating wound behind the ear; wound secretes healthy pus; was made by Dr. Peck for the purpose of connecting two post-aural sinuses situated one above the other, four and one-half inches. This pus was rubbed over the cornea of the right eye.

December 7th. No evidences of any acute inflammatory reaction were present. Second experiment: On the same day pus was taken from the eye of an adult in Ward 7, female, ophthalmic division, suffering with purulent ophthalmia. Pus was injected by means of a hypodermic syringe beneath the conjunctiva of lower right lid. Owing to the movements of the patient, injection was not as successful as could be desired.

December 10th. No signs of inflammation. Third experiment: Matter was now taken from a recent case of ophthalmia neonatorum, in Ward 7, female, and rubbed across the cornea of the right eye.

December 14th. No signs of inflammatory reaction; and, as a fourth experiment, it was determined to use gonorrhœal pus. A fresh case, of seven days' discharge, was found in one of the male venereal wards. Two drops were applied by means of the finger to the cornea and conjunctiva of the right eye. Orders were given to let it entirely alone, and not to protect the left eye.

December 15th. Within ten hours after the attempt at inoculation the right eye showed all the signs of an acute ophthalmia. No dressings were ordered, and the disease was left to run its course.

December 16th. On this, the following day, the left eye developed the same characters of inflammation.

December 25th. Copious discharge of a creamy, yellow pus from both eyes. Patient complains of considerable pain under the lids.

January 4th, 1881. Ordered a solution of nitrate of silver, gr. x, ad aq. ℥j, three days of the week, and the same solution, gr. v, ad aq. ℥j, four days of the week, with constant application of iced cloths.

Patient was discharged from the hospital at his own request in March, and visited me at the Northwestern Dispensary, April 10th, when a careful examination gave him, for vision, as follows: Right eye, four years blind and inoculated, V — finger-counting at nine feet; left eye, eleven years blind, inoculated by infection, V — fingers at one and a half feet.

Patient has engaged himself at a livery stable, as hostler, and states that his sight for this purpose is sufficient, and that he suffers no pain nor tenderness. In the right eye the iris and pupil are plainly to be seen.

Crysophanic Acid in the Treatment of Chromophytosis.

Dr. W. B. Craig, of St. Joseph, Mo., says, in the St. Louis *Medical and Surgical Journal* for July, 1881:—

Chromophytosis is due to the presence of a vegetable parasite or fungus, occupying the outer layers of epidermic cells, and with respect to its local parasitic origin, resembles trycophytosis and favus.

It is, therefore, contagious, though not in as marked a degree as other allied affections. Its site of election is the trunk and upper extremity. Occasionally it is seen upon the neck, thigh and groin. The breast and back are the usual locations. It is nearly always symmetrical in its development, commencing as small, pin-head-sized, yellowish, scaly spots at the centre of the sternum, and gradually spreads bilaterally until the entire chest is invaded. Often these coalesce, and, as in this instance, the back was completely bronzed, so great was the discoloration. These disks gradually enlarge, retaining their circular form, and are slightly elevated, excepting the diffused patches.

Itching is a symptom present to a limited extent, but it cannot be very severe, as patients are seen who seldom recognize its presence, their attention often being attracted by a physician, who is searching, it may be, for something else:

or the patient imagines he has contracted syphilis, and when interrogated as regards eruption, shows up an old chromophytosis. It occurs in early life, seldom being met with in old age. Is chronic and liable to relapse unless every patch is removed with the outer layers of integument.

The following case is that of a young man, 21 or 23 years of age, otherwise healthy and robust. He contracted the disease at school seven years ago, and has been treated almost continuously since; for the last six months particularly.

When visited by the patient and his body examined I gave rather an unfavorable prognosis, on account of the extent of integument involved and the chronicity of the malady.

However, we resorted to the corrosive sublimate lotion for a few days, followed by the following, which we ordered rubbed in thoroughly every night:—

℞. Acidi chrysophanici, ʒj
Vaseline, ℥j. M.
Ft. ung.

After using this for several days the body became acutely sensitive, as predicted by me; in fact, this is the only objection to this acid. It was again used after the irritation subsided, followed twice a week by a Turkish bath, in which sapo viridis was substituted for the other soap.

Two weeks from date of commencement of treatment the entire trunk was as white and healthy as the normal skin. I then ordered the following lotion as a precaution against relapse:—

℞. Sodii hyposulph, ʒij
Aq. rosæ, f.℥vj. M.
Ft. lot.
Sig.—Bathe with this frequently.

Treatment of Scarlatina and Measles.

The following treatment is recommended by Q. C. Smith, M.D., of Austin, Texas, in the Nashville *Jour. of Med. and Surg.*, June, 1881:—

Reduce the temperature by tepid ammoniated baths—a tablespoonful of strong aq. ammonia to each gallon of water—repeated as often as necessary to keep the temperature quite normal. Patient should remain in the bath five to fifteen minutes, being well rubbed during the time. Just before being removed from the bath one or two gallons—according to the intensity of the fever—of drinking-cold water is poured over the patient's head in a full stream, the patient quickly removed from the bath and wrapped in a dry blanket, and allowed to rest quietly twenty or thirty minutes. Then, without removing the coverings, the patient is gently but thoroughly embrocated over its whole person with camphorated vaseline, repeating the embrocation after each bath. Should the case be so mild that bathing is not deemed necessary, the camphorated vaseline embrocation is repeated three or four times a day. For internal medication, we generally use something like the following:—

℞. Carb. ammonia,
Bromide lithium, āā ʒss
Liq. acetate ammonia, q.s. ℥j. M.
Ft. sol.
Sig.—Teaspoonful, in little sweet water, every one to three hours.

For the throat trouble, put a few grains of pure, dry bisulphite of soda in the patient's mouth every few minutes; let it slowly dissolve and soak down the throat.

If this part of the treatment is unremittingly attended to during all the waking hours of the patient, the ear, laryngeal and bronchial sequelæ that so often attend these diseases will rarely if ever occur.

When patients are too large to handle in a bathing tub, we substitute the sponge bath, repeating often as necessary to keep the temperature quite normal. If this line of treatment is begun early in the attack, and faithfully followed out, little or nothing more will be needed, and recovery will usually be rapid and complete. We formerly applied the above mentioned treatment to scarlatina only, and by a blunder in diagnosis—we do make blunders sometimes—found ourself applying it to a full fledged case of measles, and the case did so well that we said nothing about the blunder—doctors usually don't—but adopted this as our usual treatment for measles. We give our patients all the cold water, lemonade, milk (sweet or sour), and fruits (raw or cooked), in small quantities at a time, that they want, plenty of fresh air, without draughts. We do not claim originality for this plan of treatment of scarlatina and measles, but can most confidently assure our fellow laborers that it has proved itself eminently satisfactory in our hands.

Reviews and Book Notices.

BOOK NOTICES.

On the Mont Dore Cure, and the Proper Way to Use It. By Horace Dobell, M.D., etc. London: J. & A. Churchill, 1881.

The Mont Dore or Mont d'Or is a famous watering place in Auvergne, France, patronized by invalids ever since the Roman Conquest of Gaul. The chemical composition of the waters include the salts of soda, magnesia and lime, and a minute quantity of arseniate of soda. Much of the success of the treatment consists in the details of the use of the waters. These have been reduced to a system more elaborate than that of a Turkish bath, including spraying, douching, aspiration, toweling, packing, etc., etc. The consequence of such thorough work, backed by regular and close medical supervision, is that a remarkably favorable record has been shown of the effects on rheumatic, gouty, scrofulous and tuberculous patients, and also in cases of asthma, bronchitis, catarrh, the early stage of phthisis and other affections of the throat, chest, and mucous membranes.

Believing that the system elaborated at Mont Dore could be successfully carried out at other localities, an establishment for the purpose has been formed at Bournemouth, England, and it

is with especial reference to this fact that Dr. Dobell has prepared this volume, describing the method in detail, explaining in what conditions it is most useful, and analyzing its beneficial results. As he is one of the leading authorities on such subjects in Great Britain, it will undoubtedly exert a permanent influence in that country, and we recommend his volume to all who would make a study of balneology in this land also.

A New Form of Nervous Disease, together with an essay on Erythroxylon Coca. By W. S. Searle, A.M., M.D., Fellow of the Medico-chirurgical Society of New York. New York: Fords, Howard & Hulbert, 1881. Cloth, 12mo, pp. 138.

The author of this work gives a very elaborate description of a peculiar form of nervous disease, many cases of which he has met with during the past seven years. Several other physicians, he states, have also met with similar cases. The disease is characterized by two principal phenomena, a sensation of a sudden *shock*, or *blow*, or *explosion* in some part of the head, the other a condition of passive congestion, usually of the cerebellum only, both sometimes extending on the one side to the cerebrum and on the other to the upper portion of the spinal cord. It may be distinguished from epilepsy by the absence of spasm of any kind, by the fact that consciousness is seldom lost, and the intermediate symptoms being constant and severe, with no intellectual disturbance, vertigo very common and violent, and other distinguishing characteristics which he clearly points out. He regards the disease as always amenable to treatment and proper hygiene. The doctor, being a disciple of Hahnemann, believes in specific medication by homœopathic remedies. He, however, describes what he called the antipathic treatment of this disease, chief among the remedies of which are bromides, belladonna, nitrate of silver, ergot, strychnia and hamamelis. Coca he regards as one of the most reliable remedies, and in the second part of his book he gives a very full description of this plant and its effect on man.

Habitual Mouth-Breathing, its Causes, Effects and Treatment. By Clinton Wagner, M.D., Professor of Diseases of the Throat, University of Vermont, etc. etc. New York: G. P. Putnam's Sons, 27 and 29 West 23d street. 1881. Cloth. Small 8vo. pp. 52. Price 75 cents.

This little book, which has been elaborated from a paper read before the New York County Medical Society, April 25th, 1881, treats of a subject of great importance, but which, nevertheless, has been heretofore much neglected by medical writers. The author shows how the lower animals and savage tribes of man invariably breathe through their noses, and points out that the latter are usually free from catarrhal diseases of the air passages; he shows, and fully explains the effects of habitual mouth breathing, illustrating these by three cuts, taken from nature, and which speak eloquently against the practice. He finally lays down a plain treatment for such cases, where either foreign growths or some other abnormal condition of the air passages interfere with natural respiration. We heartily recommend this little book to the profession, and the first part of it, that related to the injurious effects of this practice, should be reprinted and distributed as a sanitary tract among the laity.

A Practical Treatise on Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By Samuel W. Gross, A.M., M.D., Lecturer on Venereal and Genito Urinary Diseases in the Jefferson Medical College of Philadelphia, etc., etc. With sixteen illustrations. Philadelphia: Henry C. Lea's Son & Co., 1881. Cloth, 8vo., pp. 174.

The author recognizes four varieties of impotence, viz.: Atonic, psychical, symptomatic and organic. The first variety is, in the majority of cases, caused by masturbation or sexual excesses, and is frequently associated with stricture of the urethra. The prognosis is usually favorable, except in extreme cases, in which both desire and erection are abolished, and the patient is, in addition, suffering from hypochondrism. The treatment should be both local and general, and should have for its object to remove the cause. The second variety is extremely rare and usually amenable to moral treatment. The third variety is usually produced by the long-continued use of cerebral sedatives, by the prolonged exposure to certain poisonous vapors, as arsenic, lead, etc., or by injury to the brain and spinal cord. Removal of the cause, and the administration of tonics will usually cure the disease. The fourth variety depends on some abnormal condition or malformation of the penis, testes or adjacent parts, and the treatment instituted must be with a view to correcting the same. The causes and treatment of sterility, spermatorrhœa and prostatorrhœa are fully discussed, and numerous cases recorded. The work is in every respect original, and is based on clinical facts, as practical works on medicine and surgery should be.

THE

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THEORIES OF THE CAUSATION OF EPIDEMICS.

The opinion has been expressed by several medical writers, and has passed into the public press, that the world is about to enter a period of years in which epidemic diseases will be unusually frequent and virulent. The grounds of these predictions are not identical, some being the periodic return of certain "epidemic cycles," others the position of the planetary bodies, etc. It is hardly worth while to dispute seriously these statements. Science certainly does not at present permit us to make any such predictions. But it may be well to consider what knowledge we actually have of the nature of epidemics and the laws of their extension.

History seems to show, beyond doubt, that there are epidemic cycles; that certain periods are broadly discriminated in medical history by the wide prevalence of diseases of this class. This was fully recognized as far back as the age of SYDENHAM, who attributed them to certain unknown changes which take place in the bowels of the earth—*pro varia scilicet ejusdem ætate ac duratione.*

Somewhat more distinctly, the epidemiologists of a century later divided the "epidemic influence" into the *cosmical* and the *telluric* agencies, which we may also express as those relating to the *atmosphere* and the *soil*, a division borrowed apparently from Hippocrates. Carrying these upward to higher generalizations, the learned HÆSER, in his *Geschichte der Volkskrankheiten* (published in 1839), predicted that the time would come when, to explain the prevalence of these great pestilential periods, men of science would find them more or less in relation to the position of the earth with reference to the plane of the ecliptic, the progression of the magnetic meridians, the alterations in the temperature and moisture of the earth's surface, the geological changes of water and land, and perhaps even the progress of the solar system through space.

Mindful, however, of the sage warning of GŒTHE, that he who would rise to the clouds loses his firm foothold on the earth, modern students have left to one side these remote (though not valueless) considerations, in order to fix their eyes on man himself. They have taken as their maxim the observation of the celebrated HUFELAND, as profound as it is beautifully expressed: "As every individual, so has the life of man as a race its aim and purpose, its growth, periods, fruits and changes, all developed out of itself. And thus the first and chief cause of the alterations which the race undergoes is to be found in *man himself*, in the life of mankind in time, and in that self-development inseparably bound to this life, known as *culture*." (*Geschichte der Gesundheit*, 1813).

By studying the causes of disease in the individual, and what is of equal importance, the requisites to health under the varying conditions of life, we are gaining a position whence we can carry on a successful defence against some of the most dreadful pestilences of past ages. We have learned that cleanliness, wholesome and sufficient food, drainage, antisepsis and courage, can keep at bay the plague, cholera, and other formidable foes; and there is every reason to say that had

these measures been known and practiced in past centuries, history would not have such terrible desolations to record as are now spread upon her pages.

While this is true, no one will deny that certain seasons do develop, much more than others, a tendency to epidemics. A recent English writer, Dr. Guy, justly observes that, for that matter, every year has some atmospheric element which neither thermometer, rain or wind gauge, nor measure of moisture, nor test of ozone can reveal to us, but only our records of sickness and death. One year it is such as favors smallpox, the next, perhaps, it will promote scarlet fever, or measles, or whooping cough, or it will, so to speak, select from several forms of fever that one which shall fill the beds of our hospitals. This condition of air, of which disease itself is the only test and measure, was once called pestilence, but is now known as its "epidemic constitution. And this, whenever it acts on the population with such energy that the disease which it favors affects large numbers of persons, that disease is calculated an epidemic. But this epidemic constitution, be it observed, is not its true and direct cause, but only its predisposed cause."

Another epidemiologist, Dr. Parkin, holds that there occur certain "pestilential epochs," during which the world is at frequent intervals devastated by epidemics, which travel in a determinate direction, from central or eastern Asia to the west of Europe, and even to America; that during such epochs all diseases, even such as are not considered communicable from one person to another, increase in frequency and in violence; that these epochs are, moreover, marked by epizootics and by blights, or diseases in the vegetable kingdom. Such an epoch is generally ushered in by the appearance of new diseases, or re-appearance of maladies that had become obsolete. He believes that the pestilential epoch is characterized also by mental diseases, and by delusions; also that we have entered upon a new period of epidemics, as instanced by the recurrence of smallpox, diphtheria, typhoid, carbuncle, typhus, scarlet fever, diarrhœa, the increase of epizoötics, and the various maladies among fruits and vegetables.

These opinions are not in conflict with that of Hufeland, above given. Man is, in a measure, the servant of the conditions which surround him; but he is not their slave; he must obey them until he understands them; then it is his turn to become the master; then he dominates them by the divine right of rule of intelligence over material force. So it will be with the "pestilence that slayeth at noonday;" by studying it he will come to know it; by knowing it, to control it.

Notes and Comments.

Therapeutic Notes.

SUGAR OF MILK AS A LAXATIVE.

A writer in the *Deutsche Med. Wochenschrift* recommends sugar of milk as an efficient and agreeable laxative. He gives from a quarter to half an ounce in half a pint of warm water, or of milk and water, fasting, in the morning.

HOW TO GIVE TANNIN.

This useful astringent often yields unsatisfactory results when administered in powder or simple solution, either failing of effect or producing pain and other signs of irritation of the stomach or intestines. We note in a German exchange, that at the Leipzig Policlinik all these unpleasant results are avoided, and a very useful and agreeable astringent mixture, well suited to children, is prepared by forming an albuminate of tannin, according to the following formula:—

℞. Acidi tannici, 2 parts
Aquæ,
Sol. album. ovi. un., āā 100 parts.

The last mentioned is to be added with stirring briskly.

PAPAIN FOR TÆNIA.

In the *Lyon Médical* M. Bouchut reports that he has used papaïn, or vegetable trypsin, as well as animal pepsin, as a vermifuge, and he states that he not only finds it more active, but that he has relieved several children by its means. After its use a child had passed yellow softened segments of tapeworm, twenty five centimetres long, and in a partially digested state. These facts, taken with those which have been derived from the colonies in which the juice of carica papaya has been successfully used for worms, go far to prove that this new remedy will in future be of service as an anthelmintic.

NOTES ON IODOFORM.

The use of iodoform internally is nothing new in this country, as any one can see by consulting the MEDICAL AND SURGICAL REPORTER for Jan. 15th, 1870, and other numbers. But in Europe it does not seem to have been much exhibited. Sigmund speaks of it as a useful narcotic in syphilitic pains. He gave it up to half a drachm in the twenty-four hours. Windelschmidt, in the *Allg. Med. Cent. Zeitung*, June 1st, tried it successfully in convulsions of infants. His formulæ were:—

℞. Iodoformi, gr. ij–vij
Pot. iodidi, ʒ j
Vini Tokayi, ʒ iij. M.

DOSE.—Three to fifteen drops, three times a day.

Or,

℞. Iodoformi, gr. vij
Eth. sulph., q. s.
Vini Tokayi, ʒ iij. M.

DOSE.—Five to ten drops, three times a day.

A woman suffering for two months from severe sciatica, of syphilitic origin, was readily relieved by a grain to a grain and a half, three times a day.

Prof. Simon, of Breslau, employs it extensively in skin diseases. Used locally, its peculiar power is to *excite healthy granulations*. Hence it is especially indicated in old ulcers, fistulæ, obstinate buboes, etc. Its odor is best concealed by balsam of Peru, or oleum melissæ, three parts to one of iodoform. An excellent combination is one part of iodoform to fifteen of collodion. This makes a firm iodoformized coating over soft ulcers, etc., preventing their spreading.

Large Calculus—Supra-Pubic Operation.

An interesting case is recorded among the reports of the Société Anatomique (*Progrès Méd.*, April 16).

A patient 61 years of age entered the service of M. Guyon; for six years he had suffered from urinary troubles; he had pain in the region of the bladder almost constant, but augmented by walking or riding; for the last two years he has had, in addition to the pain, an almost constant desire to pass water.

Examination with the catheter was difficult; bleeding from the urethra was induced; the bladder bore little manipulation, but it was made certain that the organ contained a very voluminous calculus: this was confirmed by rectal exploration, which revealed a hard, smooth tumor situated behind the prostate.

A second examination, a few days later, confirmed the first, and the volume of the stone was found to be so considerable that it was determined to remove it by the high operation.

A large silver catheter, grooved on the concave surface, was introduced into the bladder, and about two ounces of liquid injected; a vertical incision about four inches in length was made in the median line, commencing at the superior border of the pubis. Layer after layer was incised, an aid holding up with the finger the peritoneal cul de-sac and intestine at the superior angle of the wound.

It was found impossible to make the end of the catheter appear at the wound, and the bladder was incised directly over the calculus, which filled the organ almost completely; it was removed with forceps after considerable difficulty, the bladder being slightly torn at the inferior angle of the wound. Deep and superficial sutures were passed, a space of three centimetres being left at the inferior angle of the wound, to allow of the free passage of pus, etc.; a rubber catheter was placed in the bladder, the external end passing out at the inferior angle of the wound.

The calculus was enormous, nine centimetres (three and three-fifths inches) in length by seven centimetres in width and five in thickness; it weighed three hundred and forty-six grams (eleven and a-half ounces).

The day following there was slight fever, with but little discharge from the wound, but the next day the fever was higher and the discharges of a dark color. The succeeding days the general condition became worse; the urine was dark colored; there was intense urethritis; the temperature mounted to 104°, and the patient succumbed on the sixth day.

Extra-Uterine Pregnancy—Removal of Decomposing Fœtus Through Umbilicus.

The *Obstetric Gazette* for June, 1881, states that at the meeting of the Baltimore Academy of Medicine, session 1880–81, Dr. Erich exhibited a specimen of a decomposing female fœtus of about nine months' development, with the following history: "In February, 1880, the patient noticed that she was getting "a lump in her stomach." Toward the latter part of the following spring she quickened. She continued to grow larger until August; then the swelling began to diminish, and violent, cramp-like pains, with symptoms of peritonitis, appeared. In October pus began to discharge through the umbilicus. When, two days previous, the patient came under the Doctor's care, she emitted a most offensive odor. The head of one femur projected

from the umbilicus, and on the day of the report the entire fœtal remains were removed. No cutting was done and as little interference with the sac as possible was practiced, for fear of making an opening through some other part of the sac, weakened by the degenerative process. A portion of the scalp was found attached to the cyst wall and was removed. The parietal and frontal bones were found lying loose in the cyst. Evidently the fœtus had reached term early in August; the liquor amnii had then been absorbed, and in consequence of this peritonitis had been set up. There was no sign of the placenta, which probably was absorbed. The after-treatment consisted in filling the cyst with carbolized cotton. so as to cause it to heal from the bottom, and cause all the decomposing matter to be thrown off. The patient was doing well.

Subcutaneous Injection of Ergotine in the Treatment of Enlarged Spleen.

Dr. W. L. Barret, of Covington, Tenn., reports, in the *Southern Practitioner* for June, 1881, the case of a girl who had suffered for some time from malarial fever, first of an intermittent and later of a remittent type. The spleen was greatly enlarged. He injected ergotine, four grains in solution, beneath the skin, immediately over the spleen. Three days after he visited her, intending to repeat the injection, but to his surprise found that the spleen had resumed almost its normal size.

He writes that she is now well and suffers no more from that troublesome condition—an enlarged spleen.

He further states that his friend, Dr. T. W. Roane, has also used it with excellent results in a number of cases of enlarged spleen and liver, the result of malaria.

Correspondence.

Pathology of Tuberculosis.

Ed. Med. and Surg. Reporter:—

I must apologize for not sooner replying to the inquiry from Dr. O'Neal, in your issue of March 5th, but it escaped my attention, and I do so now.

If Dr. O'Neal had perused the full work by Dr. Salisbury, on the Causes and Cure of Consumption, based on an experience of over 1000 cases, corroborated by myself, as follows:—

I. Fasciculus. "On a New Physical Sign of the Pre-tubercular Stage;"

II. Fasciculus. "The Morphology of the Consumptive Blood;"

III. Fasciculus. "Treatment of Consumption on the Salisbury Plan;" he would not probably have asked the question. (I may as well state that this entire work awaits publication, and is ready when called for by subscription.) Of course, I did not expect to give a full account, in the third Fasciculus, which was published by the American Medical Association, nor can I here do so; still I will try to make clear my meaning to those who have not perused the great work, or who chance not to be instructed in the clinical examination of blood or sputa, for which I beg to refer to my Primer of the Clinical Microscope, Chas. Stodder, Rialto Building, Boston, price 25 cents. Now for the explanation.

"Tubercle is a secondary product in consumption." That is, the "little tuber," organic bunches, granulations or granules of low vitality, found in the substance of lungs or other organs of consumptives, are not the prime factors in the disease; or, in other words, the primary factor. We do have tubercle in consumption. It is possible to have consumption without tubercle. In the work alluded to above, the primary element, factor, or morphological, pathological constituent, is regarded to be the presence of a vinegar yeast in the blood.

In Fasciculus I, I have shown the evidence, the truth, of the position taken in the Salisbury plans, that the seeds (so to speak) of consumption are found present in the blood any time during one year preceding the actual lung necrosis. This state I have called the pre-tubercular state. and this fact I corroborate. The microscopical examiner discovers the presence of consumption in the blood before the lung necrosis; this makes this instrument of precision one of the most valuable means of relief found in the whole history of medicine. I speak from personal experience; my oldest son's life was thus saved to himself and family. Now this son had consumption, without any tubercles in the lungs. Those who have consumption of the bowels have consumption without tubercle in the lungs. Again, the author of the Salisbury plans fed 1026 healthy swine on food consisting mainly of starch and sugar, filled with yeast, more or less; soon they had diarrhœa; immediately, he found in the blood vinegar yeast, which is the next development beyond ordinary yeast, that produces carbonic acid, alcohol, water, etc. In the course of eight weeks 246 swine died. Of these, 104 were subjected to autopsy. All were found to have died of consumption, as proved by finding in the chest of each such physical, macroscopical, pathological appearances as are found in people whom everybody says has consumption. Of 100 well hogs that had been fed on good, clean and sweet corn, out of doors, and were slaughtered for food, none were found tuberculous. These experiments I offer to repeat if I am aided, under proper circumstances. Now, after long experience and study, I pronounce this series of experiments without parallel in history. Certainly they furnish foundation enough for the statement that consumption is a systemic disease produced in the cases in question by feeding to them unhealthy aliment. That it is a systemic microphytic parasite of a tissue that pervades the parenchyma of all the organs and anatomical elements, that is, the blood.

To proceed: "Tubercle is a secondary product produced by the embolism." Now, what is em-

bolism? If an eel gets into the valves of a Corliss engine and blocks them, so that the engine stops, as it did in Rhode Island the other day, we may for the moment call the eel the embolus or plug, that stopped the engine. Now, the eel, before it acted as a plug, was in the system of pipes conducting water to the engine; while in this state we should call it a *thrombus* or aggregation of organic matter, before it became a plug or embolus. Now to apply this to our subject. In man we have an engine fearfully and wonderfully made. The human body is a machine with arteries, veins and capillaries to circulate blood. These capillaries are of a standard diameter, $\frac{1}{3000}$ inch; their length is appalling. The late Dr. Rufus King Brown, of New York, used to say that if the capillaries in a man could be separated and put end to end, they would reach 75,000 miles. Dr. Harriman, D.D.S., and myself doubted, and lately we have found our own bodies to contain between 4600 and 4700 cubic inches. Estimating, then, 2325, one half of 4650 cubic inches, to be made up of tubes $\frac{1}{3000}$ of an inch in diameter, we figured that in one square inch we should have 3000 inches, and 3000 times 3000 in a cubic inch, = 9,000,000 inches, = 142 + miles in one cubic inch of capillaries, thus $142 \times 2325 = 330{,}150$ miles of capillaries in our bodies. Not that every drop of blood has to travel this enormous distance, but that this is the distance given it to travel. (We have given our data, and should be grateful to have any error pointed out.) Now in the blood of consumption (1) the white corpuscles are enlarged by the yeast growing inside; they stick together more than in health; they *mass*; hence our author calls them "massal." (2) The red corpuscles also are pale, sticky, adhesive, plastic, crowded together in confused masses, not generally nummulated, are drawn out into long prolongations. (3) The fibrin filaments are strong, massive, so that they fill the whole field up with a close network; masses of spores of the vinegar yeast are everywhere found. These masses, the fibrin filaments, the white corpuscles, and possibly, the red corpuscles, either singly or combined, form thrombi, or masses that do or may become emboli, or plugs, that catch in the capillaries and block them up. The nutrition is interfered with, and this interference is regarded as the best explanation we have of the formation of tubercle, which one eloquent writer defines, "Infant Tissue Strangled in the Birth." We must never lose sight of the fact that our bodies are continually under renewal and decay. It is this process interfered with, by plugging up the capillaries, that strangles the infant tissue in its birth. Again, the vinegar yeast goes on growing and producing (we have every reason to believe), its acetic acid and other products. This, added to the process of acute and sub-acute inflammation results in necrosis of the lungs, for example, and it breaks down and is removed by coughing. This rationale of breaking down has its analogy in the dry rot of timber. All agree, that it results from fungus growths, and no one is impressed at even the white oak being destroyed.

It is not surprising, then, that the influence of yeast vinegar breaks down the lungs, but it is remarkable, that it does it so that even in decay the arrangements of the elastic lung fibres are simply beautiful and magnificent veins. (See *Phin's Microscopical Journal*, New York, 1881).

EPHRAIM CUTTER, M.D.

Boston, June 24th, 1881.

More About Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

I have just read, with much interest, a communication in the July 16th number of the REPORTER, from the pen of Dr. Chas. H. Miller, of Peabody, Kansas, entitled "Maternal Longings and their Influence on the Fœtus in Utero."

It is almost an every day experience to hear or read something about the influence of maternal impressions on the fœtus; and it seems as if the profession were thoroughly on the *qui vive* to obtain every scrap of information that can throw light on the subject. So far as I have a knowledge of the literature of this subject, the whole of the testimony seems to be upon one side. In fact, not only do our professional brethren furnish us innumerable instances of wonderful formations and mal-formations, the result of maternal impressions, but even the laity, almost to a *woman*, constantly relate instances that encroach upon the fabulous. Before going further, let me say that I do not doubt the correctness of Dr. Miller's paper in the minutest particular.

During the month of March I was called to attend Mrs. A., in her second confinement. After the birth of her first child—she was then fifteen years of age—she contracted syphilis, and for three or four years was under constitutional treatment. The second labor was natural, but tedious. The child was born with a *spina bifida*. After the mother and child had been "changed" and dressed, I explained to the father the nature of the baby's misfortune. He made light of the subject—at the same time assuring me that his wife had been frightened by a cat-fish, and this was only a "cat-fish birth-mark". The wife held the same opinion, saying that she had fully expected the baby to have just such a mark. In four weeks the child died, and the parents were convinced of their error.

About nine years ago I attended Mrs. D., in her first confinement. The labor was natural. There was nothing striking about mother or child. The mother was, and is, a thin, delicate looking woman. Last winter I met the mother of this lady at a neighbor's, and took occasion to inquire after the little boy above mentioned. She said, "Oh, Doctor! he is very puny. The night his mother was confined she dreamed a gentleman-cow walked through the kitchen door, into the house, and frightened her so that she ran into the closet; and then she awoke; and her waters broke. Now, Doctor, everybody knows the child could'nt be healthy after that." What a common experience it is with us to hear the mother anxiously inquire, after the child is born, "Is it all right," or, "Is it perfectly formed?" and when the question is answered in the affirmative (as it generally is), "Oh, I am so glad! for I was frightened by a cripple?" or a snake, or a cow, or something. It is a belief

among women, as firmly fixed as the belief in deity, that maternal impressions during pregnancy, especially fright, necessarily affect the fœtus; consequently every pregnant woman is on the watch, like a shying horse, for something to get frightened at; and such a something generally comes along, which, of course, she never forgets. Pregnant women always long for something unattainable; why then are not children more frequently marked by these longings?

C. H. Shivers, M.D.

Haddonfield, N. J., July 19th, 1881.

Ed. Med. and Surg. Reporter:—

I send you the following as a well marked case of maternal impression, which occurred in my practice last winter:—

On February last I was called hastily to attend Mrs. S., who was said to have been in labor for over thirty hours. This was her fifth pregnancy, and previous to this one she had been attended by a midwife, her labors being normal and comparatively easy.

She informed me that she anticipated some trouble with this child, as some time before she became terribly frightened, by seeing a man who had received a shocking injury to his thumb.

The child was born not long after my arrival (I found a shoulder presentation, which was corrected), and on examination I found that the thumb of the right hand was attached by only a very slender filament of skin, and I could have easily detached the thumb of the infant with my fingers alone, without any trouble, but the mother wished it to remain.

As near as she could remember the imperfect hand of the child seemed to be the same (the right), as that of the man whom she saw in the early months of her pregnancy. The other children of this patient were healthy and well formed.

J. H. Burchmore, M.D.

N. Evanston, Ill.

A Treatment of "Diphtheria."

Ed. Med. and Surg. Reporter.

Dr. Maynard, who writes in the *Medical Times and Gazette*, December 30th, 1865, "employed in the early stages of the disease the hyposulphite of soda, in solution with glycerine and water, viz.:—

℞.	Sodæ hyposulphitis,	ʒ ij	
	Glycerini,	f. ʒ ij	
	Aq. puræ,	f. ʒ vj.	M.
Ft. sol.			

He states that it generally removed the incipient exudation in forty-eight hours, or in less time. In advanced cases the throats are washed well with warm water, by means of flexible tubes, and dressed with the following solution:—

℞.	Sodæ hyposulph.,	ʒ j	
	Glycerini,	ʒ j	
	Aq. puræ,	℥ j.	M.

Dr. Maynard says, "This seems to solidify and dry up the false membranes, and when the syringe is again used, which should be done frequently, the force of the water will either wholly or partially wash it away." The membrane rarely reforms, and the patient makes comparatively a rapid recovery.

Where there is much swelling he uses, as an external application, the solid extract of belladonna. The constitutional treatment should be stimulating and nutritive. The above is a good treatment, and I gave it a fair test during an epidemic in this place, some two or three years ago, and will certainly try it again should that dreaded malady appear here again.

In addition to the above treatment I have been successful with mur. tr. iron and chlorate of potassium, both locally and internally. I take the following:—

℞.	Tr. ferri mur.,	ʒ ij	
	Potassæ chlorat.,	ʒ j	
	Aq. puræ,	ʒ iv.	M.
Ft. sol.			

Sig.—One teaspoonful, according to age of patient, every three hours.

Many little ones are unable to gargle or rinse their throats; so, when the preparation is swallowed it comes directly in contact with the diseased membrane, both in the front as well as the back of the throat.

Before using the solution I order the inhalation of equal parts of good vinegar and *hot* water (a common vessel with a spout. when a good inhaler cannot be had, will do); the vapor from the same softens the membranes (especially in the catarrhal form), and the sufferer is relieved to a great extent of very *great* distress. As we have a constitutional or rather blood disease to treat or contend with, I cannot find any better remedies than those I have just mentioned. I have had good success with both plans of treatment. I neglected to mention that I never fail to give quinine in appropriate doses, according to age of patient; it gives happy results in many cases.

W. B. Powell, M.D.

Natchitoches, La., July 7th, 1881.

The Organization of Medical Societies.

Ed. Med. and Surg. Reporter:—

Your editorial of July 2d, "Suggestions Toward a Plan for Reorganizing Medical Societies," was a good one, and should be thoughtfully considered by every physician who has the best interests of the profession at heart.

The *regular* profession of Indiana is organized upon a plan very similar to the one you suggest. The County societies are auxiliary to the State society. The representation being a given per cent. of the membership of the County society. At present, I believe, one delegate to every five members. No physician can be an "Active Member" of any other County society than the one in which he resides. All members of the County societies are, by virtue of that membership, members of the State society, and may attend and participate in its proceedings, but none but delegates are permitted to vote. No district *societies* are permitted representation. Each County society pays one dollar per year as the dues of each member in good standing. Were the National, State, and County societies organized upon such a plan as you suggest, and the Code of Ethics abolished, or the golden rule

adopted instead, in my opinion, the profession would be benefited in many respects. I would like to hear suggestions from younger members of the profession on the abolition of the Code.

Rensselaer, Indiana. I. B. WASHBURN, M.D.

NEWS AND MISCELLANY.

Alumni Association of the Albany Medical College.

At a meeting of the Executive Committee of the Alumni of the Albany Medical College, held June 16th, 1881, the president stated that he had given considerable thought to the matter of prize essays, to increase the interest in and efficiency of the Association. He had concluded to offer an annual prize of $100, to be called "A Surgical Prize," and would announce as the subject for this year, "Essay on Colles Fracture," Its Pathology and Treatment," to be accompanied with pathological specimen illustrating the fracture, with or without dislocation of the ulna, or a careful dissection of the hand, wrist, or forearm.

After favorable remarks by members of the committee, on motion of Dr. S. Hale, Dr. Van derveer, the president, was appointed a committee of one, to give the matter further consideration.

Subsequently, he reported that the heirs of the late Prof. Alden March, M.D., LL.D., desired to give the sum of $100 as an annual "March Memorial Prize," the essay for the coming year to be on "The Pathology and Treatment of Morbus Coxarius." Also, that Mr. McClure, a governor of the Albany Hospital, had decided to give the sum of $100 annually, as an "Armsby Memorial Prize," the essay to be on some anatomical subject. That for the coming year will consist of a minute description of the genito-urinary organs of the male, together with a carefully dissected specimen of the same.

The President further reported that the heirs of the late Prof. James MacNaughton, M.D., had offered the sum of $100 as a "MacNaughton Memorial Prize." The subject of the essay for the current year to be "Antisepsis in the Treatment of Diseases." And Mr. Joseph Russell, a trustee of the College, offers for this year a Second Surgical Prize of $50 for the second best essay on "Colles Fractures."

Essays and specimens, designated by a motto, and accompanied by a sealed envelope inclosed with the same motto, and containing the name and address of the author, must be sent to the Secretary, Dr. W. G. Tucker, by the 14th day of February, 1882.

The Committee to examine the essays for this year will consist of Drs. A. Van Derveer, J. S. Mosher, and Lorenzo Hale, and they reserve the right to reject any or all the essays, if not deemed worthy.

All specimens are to be deposited in the New Museum of the College, properly labeled.

The American Surgical Association.

This Association will hold its first regular meeting at the Oriental Hotel, Coney Island, September 13th, 14th, and 15th. Papers are promised from several gentlemen.

Transvoyance.

Our readers will remember that Dr. Geo. M. Beard refers, in a recent letter to the REPORTER (vol. xliv, p. 583), to the phenomena of "transvoyance" he has witnessed. One of his subjects was a Mrs. Carpenter. Dr. Beard and a medical friend of his, who was a surgeon, bandaged her eyes with all the skill they could devise, first using cotton-batting and then three bandages of cotton cloth. When this was completed, Dr. Beard drew from his pocket a pack of cards, and held them, one after another, to her forehead in such a manner that neither he himself nor any one else in the room could see their faces, yet in almost every case she told the card at once, hesitating only between the nine and ten spot cards. He then held some large type print to her forehead, and this he found she could read slowly, though she failed to decipher fine print. On coming out of the trance Mrs. Carpenter could remember nothing that had taken place. On a subsequent occasion the same experiments were repeated, but failed completely, a result which the subject attributed to the wet weather which then prevailed, saying that she had found that this was always unfavorable to trance experimenting in her case. The third time the tests were applied, however, the same success was met with as at first. Dr. Beard states that he exhausted every means of preventing deception which occurred to him or his friends, and he is convinced that it could not possibly have been practiced.

Healthiness of Roman Hotels.

The foreign physicians in Rome lately appointed a committee to investigate the sanitary condition of the Roman hotels. This seems to have excited the ire of the native medical men. We have before us a copy of *Il Popolo Romano*, July 4th, containing an account of the meeting of the Italian Medical Association at Rome, wherein the action of the foreign physicians is criticised, the hotels declared in good condition and the healthtiness of Rome in general defended. We do not sympathize with their position; and this obstructiveness to sanitary work is a discredit to the Roman profession, and will deteriorate from their reputation.

The Storage of Electricity.

The discovery of a convenient method of storing and transporting electricity, by M. Faure, will, no doubt, exert a marked influence on the use of this agent in medicine, as well as in the arts in general. Already Prof. Thompson has applied the storage cell to use in employing the cautery; and as a means of furnishing light for endoscopes, etc, and applying electrical treatment at the homes of patients, it will have many applications.

The Battle of the Surgeons.

Two very large works on surgery have simultaneously been announced, the one an "International Encyclopædia," by W. Wood & Co., the other a revised edition of Holmes' "Sys-

tem," by H. C. Lea's Son & Co. The former further say that the revision of Holmes is ,'impracticable," while Messrs Lea & Co. rejoin that one or more of Messrs Wood's announced international contributors have withdrawn from the enterprise. No doubt the contest will be active between such vigorous competitors.

The Ohio State Medical Society.

The Ohio State Medical Society has arranged with the *Ohio Medical Recorder* to become the journal of the Society, under the name of the *Ohio Medical Journal.* The former editor of the *Recorder* is also Secretary of the Society, and continues to edit the *Journal.* The Society, in a circular issued by the publishers, takes credit to itself for "becoming the first State to take the new departure in issuing its proceedings," but to others it may rather appear as if the energetic editor had captured the Society.

Personal.

—The great evolutionist, Professor Hæckel, has gone to Ceylon to pursue biological investigations.

—Dr. Madame Bré, a regular graduate of the Paris medical school, is an officer of the Académie de Médecine.

—On June 5th the 50th anniversary of the doctorate of Professor Pirogoff was celebrated at Moscow, with imposing ceremonies.

—The honorary membership of the New York Medico-Legal Society has been unanimously conferred on Mr. Jabez Hogg, Consulting Surgeon to the Royal Westminster Ophthalmic Hospital.

—Professor Virchow's sixtieth birthday, and the twenty-fifth anniversary of his appointment to his chair at Berlin, are to be celebrated together, October 13th, by the Medical Society of Berlin.

Items.

—The weather has been unusually hot in England this year, and several cases of sunstroke and heat exhaustion are reported.

—Within the last six months there have been 1073 deaths, a large proportion of them from yellow fever, in Vera Cruz.

—The Governor of Iowa, after a personal examination, has decided that there is no ground for the charges of mismanagement in the Southern Iowa Insane Asylum.

—Six of those who survived the terrible tornado at New Ulm, Minnesota, have become insane, from the shock. A number of deaths are reported in other sections visited by the tornado.

—The Trustees of the Pennsylvania State Hospital for the Insane, at Norristown, have awarded to E. Ginrich, of Lebanon, for $72,592, the contract for erecting a new building, to be used as a ward for violent female patients. There are now 767 patients in the institution.

—During the seven days from July 10th to July 16th inclusive, there were 264 deaths in Cincinnati, from sunstroke, and 150 from the effects of the excessive heat in that city. The maximum of deaths from these causes on one day was 86, on the 14th instant. During those terrible seven days the deaths from other causes besides the heat numbered 153. The figures are official. In the same week over 100 cases of sunstroke occurred in Columbus, Ohio.

—The production of wine is rapidly increasing in the United States. The American vineyards are constantly improving, and it is certain that table wines of low alcoholic strength produced in this country are purer than those imported. Pennsylvania had 1944 acres planted, producing 114,535 gallons, valued at $128,097. The California product was 15,067,155 gallons, valued at over $5,000,000. The total area devoted to vines in the United States is 181,583 acres, and the total production was 23,453,827 gallons, which were valued at $13,426,174.

QUERIES AND REPLIES.

Ethics.

Dr. D. G. T., of Tenn.—1. When several physicians in a community definitely agree to a fixed rate of fees, it is superfluous to say that it is dishonorable for any one of them to charge less than the amounts agreed upon, unless he notifies the others of his intention to do so. 2. The remaining physicians who have suffered from such action do nothing more than exercise a just privilege when they inform their patients that the fee bill was agreed to by the physician who had surreptitiously disregarded it.

Impotency.

Dr. J. D., of Mo., asks suggestions for treating a case of complete inability of erection in a young man of 19, otherwise healthy. The cause appears to be excessive venery, from the age of 13. We suggest the use of the cold steel sound, with electricity.

Dr. B. J., of Md.—*Guaco* is a term used in Brazil for any antidote to a poison, and has been applied to the *Micania guaco*, a plant of the compositæ. A recent writer from New Granada says it is extensively used in that country. An infusion of the leaves is used internally, and a poultice o them applied to the bite.

Student inquires for the best vehicle in which to administer mono-bromated camphor.

Dr. C. R. inquires whether there are any known applications or manipulations which will restore the natural fullness to the mammæ of a female who has borne children.

MR. EDITOR.—*Dear Sir.*—In reply to H., of Iowa, I can speak more highly of electricity than of any or all other remedies, though in this country many rely on hot baths at the hot springs. Results good.

Colorado. F. ROYS, M.D.

MARRIAGE.

WILLIAMS — SCOTT.—In Shreveport, La., on Thursday, June 30th, by Rev. Dr. W. C. Dunlap, Mr. Burgess L. Williams, of Fulton, Ark., and Miss V. Pallie Scott, daughter of Dr. J. J. Scott, of Shreveport.

DEATH.

THOMAS.—At White Sulphur Springs, West Va., on July 16th, Dr. John Hanson Thomas, of Baltimore, in his seventieth year.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

DISEASE OF THE HEART.

BY ALONZO CLARK, M.D., LL.D.,

President and Professor of Pathology and Practical Medicine in the College of Physicians and Surgeons, New York.

I have some specimens here which you may examine and pass around among you. Here are two specimens of aneurism of the heart, and upon the inside of the cavity a new membrane has formed, as if to protect the thin walls and prevent them from bursting. Here is another, of stenosis of the mitral valve; the thickening of the leaves of the valve is striking. Here is another, of curious perforation from one ventricle to the other, an opening through the septum ventriculorum. It occurred in a young child, and the history was not obtained. Here is a fatty heart with rupture of the right ventricle. Here is a heart with perforation of the septum; it was taken from a German woman, forty-five years of age, who had grown-up daughters. She was a patient in Bellevue Hospital twenty years ago. Her occupation was that of making lucifer match boxes. So far as the daughters knew she had never exhibited any indication of disease of the heart; they said she was never blue in the face, and she was not particularly short of breath in going up stairs. But she got pneumonia just before coming to the hospital, and the pneumonia developed cyanosis, and she died. We found this heart with an opening between the right and left ventricles, and it was entirely callosed, nothing new about it; if it was artificial it had become fully cicatrized. Now, how would you account for the fact that that opening had existed for forty-five years, and yet had given no indication of its presence? I think I can tell you. The heart beat quietly, and although the left heart is a good deal stronger than the right, if its whole power is exerted, yet the force it impressed upon the blood was only equal to that of the right heart, and the two currents, if they had a tendency to mingle, were opposed by equal force on each side, and as the right and left heart beat at the same instant, the blood in either ventricle would prevent an entrance of the other into it. But when a circumstance occurred that caused an increased action on one side of the heart, the blood of the two sides became mingled. The left ventricle would seem to have exerted less power than the right during the pneumonia, for the circulation in the lungs is hindered during pneumonia, and it calls for a greater force on the part of the right ventricle. This caused a portion of the venous blood to pass through the opening in the septum ventriculorum, and it became mingled with the arterial blood, and it was evidenced in her face and fingers, and indeed, over most of her body. The opening, when the heart was first removed from the body, was large enough to admit my three fingers, and it is pretty evident that it was congenital; but how such an opening could exist and not disturb the action of the heart it is almost impossible to conjecture, although I have tried to give you the most plausible explanation of it. It must have been a very even life that she led; she must have been free from all diseases that disturb the circulation, as in children with an open foramen ovale, who will get along very well as long as they are cheerful and happy, but as soon as they

begin to cry or to become strongly excited in the emotions they become blue. They may grow up to a pretty good age, and yet cyanosis will occur whenever anything occurs to disturb the harmony of the circulation in the two hearts. During a crying spell the respirations are slow and forcible, the blood requires some additional power to circulate it through the lungs, and this produces the disturbance referred to. This opening in the foramen ovale does not seem to disturb the circulation so as to induce hypertrophy of the heart unless the person live a very uneven life. In the calm of home the heart's circulation goes on evenly enough, and the venous or arterial blood does not pass into the wrong auricle, probably for the same reason that I just named, that the force of the two auricles in contracting upon their contents is so nearly equal that one current opposes the other and prevents any passing through the opening.

On Friday last we were considering, at the end of the hour, heart clots, and I observed that some of you opened your eyes when I spoke of ante-mortem heart clots. I told you that whenever a clot is attached all around the walls of the cavity in which it occurs, you may be absolutely certain that the heart has never beat since the clot was formed; in other words, that the man was dead before the clot was formed. I told you further, that if the clot be divided into a light and dark portion it must have had time to coagulate after the subsidence of the blood corpuscles. It is generally supposed that the blood will not coagulate in the body until six hours after death, or until after it has stood in the body for six hours, and during that time the blood corpuscles have time to settle to the dependent portion of the circulatory fluid, which then coagulating is partly light or buff colored, and partly dark. Then I told you that the indentation made in the clot, which extends out into the aorta, is very poor evidence of ante-mortem formation; the valves of the heart would have very little power to impress their mark upon such a coagulum if it formed before the heart ceased to beat; the indentation is made by the valves hanging down passively after death.

The vast proportion of clots that are seen at post-mortem examinations are of the kind that I have been referring to, those formed after death, but it is possible for a coagulum to form during life. I have a very beautiful specimen of the kind in the museum. The late Dr. John Cheeseman had a patient, a lady, who was subject from time to time to faintings, and directly after she had been laid upon her back the faintness would pass away. She had at length a fainting which was fatal, and Dr. Cheeseman obtained a post-mortem and found in the left auricle a ball fourteen lines in diameter, perfectly rounded, and of a grayish white color. It had been pushed down into the auriculo-ventricular opening, so as to separate the two curtains of the mitral valve, and it was wedged in there so that it required a little force to get it out. This stopped the return of the blood from the lungs into the left heart, and her death was almost instantaneous. This mass was rounded about as perfectly as an artist could form a ball. It had no rough surfaces, was perfectly smooth, and had been playing there long enough to produce a sort of cicatrization at the points of contact with the valve and at a little distance, about half an inch, within the auricle; they presented a sort of callous appearance; new fibrinous matter had been formed there by the irritation of this ball, and that was evidence that it had been there for some months at least, though there was nothing in her history which would fix exactly the time at which it formed. When the clot was cut open it was found to be composed of layers, just as a coagulum in an aneurism is made up of layers. In the middle of it was nearly a teaspoonful of very dark-colored, viscid fluid. The coloring matter of the blood had by some means found its way into the centre, where there was no coagulation. The layers of the ball were all of a grayish white color. After the coagulum first formed, the heart, of course, must have been embarrassed for a time, but the only effect of the contraction of the heart upon it would be to roll it into a ball, and this ball would be pushed down into the auriculo-ventricular opening every time the left auricle contracted, but it would leave a space on either side, through which the blood could pass. And the blood did pass for months in this way, but at length, for some reason, there came a stronger heart beat than usual, and drove the ball into the auriculo-ventricular opening, and there it stood until the post-mortem.

Nearly forty years ago a heart was brought here from Bellevue Hospital, in which there had formed something that looked like a polypus. It was attached to the septum-ventriculorum in the left ventricle, and its attachment was pretty close, and it looked as if it were a new growth. I made an opening into it, and found in the interior a fluid of a yellowish-white color, of about the consistency of pus, and which at first I sup-

posed to be pus. I took it first for a polypus that had grown out of the walls of the heart, and in which afterward inflammation had occurred and produced an abscess; but, of course, I was not satisfied with seeing it by the unaided eye, and I put some of the yellowish material under the microscope, and there was not a pus globule in it. It was a transparent fluid floating a great quantity of fragments and little globules a thirty-thousandth of an inch in diameter, or smaller. Before I had come to the conclusion that it was an inflammatory process that had produced this material I expected to find vessels in the pedunclc (which was about half an inch long) running from the heart into the polypus. I examined it very carefully, and could find not a sign of a vessel; not a sign of vitality except fibres, but they were such as occur in a coagulum of blood. Then, as before said, on examining the fluid I found that it was not pus at all, but oily-like fluid, containing a multitude of broken down fibres and granules. I remembered then having examined a plug that had formed in the femoral artery in a patient with phlegmasia dolens, or milk leg, and found that the outer coat contained no vascularity whatever, and that the fluid material within it was just like what existed in this heart-clot. There must, therefore, have been a breaking down of the clot; as it possessed no vitality its fibres began to disintegrate, and fluid in some way, perhaps by imbibition, found its way into it, and in this the débris was floating.

Since I met you last a case of singular interest occurred to me. A gentleman from the West was sick at the house of his father-in-law in this neighborhood, and I saw him once or twice a week for five or six weeks. The prominent features of the case were an inability to lift the right arm, and the presence of pain. He could not raise it in this way, for his life. At first it seemed to be a paralysis produced by pain; for about four months ago, while attending to his business as a merchant, he experienced a sharp pain in the top of the shoulder, and it persisted so long as he continued to use his arm, and after about three o'clock in the afternoon he gave up attempting to do anything with his arm, and went home. From that time until I saw him the pain had been growing worse and worse slowly all the time. He would have, necessarily, days of comparative rest, but in the main it may be said that pain was the prominent feature of his case. Then there was œdema about his neck, almost wholly upon the right side. There was œdema upon the chest, and marked œdema of the arm, which gradually settled in the hand, and made a cushion upon the back of it. The physicians who saw him before I did called it neuralgia, or neck pains. Two were of the conviction that there was an aneurism of the ascending aorta, and that this pressed upon the nerves in such a manner as to produce pain. Of course, at my first visit to him I examined carefully, to ascertain whether there was aneurism. I could not find it; I could not find any evidence of the arteries being enlarged, or, for that matter, diseased. The case went on getting no better. Nothing that we did for him relieved him at all. The only comfort we could give him was by morphine. He died on Thursday night, and a post-mortem examination was made on Saturday. I could not be present, but got Dr. Welch to represent me, and bring me his report. He said a new growth had occurred near the neck, about the nerves of the axillary plexus, but this was not exactly a revelation after death, for we could feel it by examining the neck during life. It pressed upon the axillary plexus, and descended into the upper part of the thorax, and planted itself upon the upper border of the vena cava descendens. It had grown so as to indent the vena cava, and reduce its cavity so that it would hardly receive a small probe. From this point coagulation had taken place, extending downward to the right auricle. It began probably weeks before he died, and gradually accumulated more and more downward. The new growth had diminished the calibre of the vena cava more than four fifths, and had then extended on down to the right auricle, and had formed an old coagulation of moderate size; and it appeared that a new coagulation had formed upon that, either suddenly or in the course of an hour or two, and that had stopped the man's breathing; the blood was prevented from entering the right auricle by this new coagulation upon the old one.

Another point of interest in this case comes to mind: The level of the fluid in the chest cavity a few hours before death was two fingers' width below the inferior angle of the scapula, but at the post-mortem examination the chest cavity was found full of fluid, and the liver was crowded downward, and a spout of transparent serum came out when the chest cavity was opened. Now, how shall we account for that? In this way: When his breathing became difficult by obstruction, at the right heart, the venous circulation, of course, was very much retarded, and particularly that of the pleura, for the veins enter the vena cava descendens just about the point where the obstruction occurred. The ob-

structed veins became filled, of course, and they poured out their serum in great quantity, and with great rapidity. There was probably a gallon of fluid effused after the suffocation began.

I was called to see a gentleman not far from here who had a swelling of one leg, and a pain in the calf of that leg. The pain was so severe that his physician was induced to apply a blister to the leg, supposing there was inflammation. There was swelling from œdema, and there was pain, and these two conditions had deceived the Doctor. After I had visited him a day or two, the other leg began to swell, from œdema, and there was pain in the calf. He got better of this, so that he could sit up and walk about his room a little, when suddenly, as he was standing near his bed, he found himself sinking and losing his breath, and he threw himself upon the bed, to prevent falling upon the floor. When I saw him, an hour or two afterward, his face was as purple as it could be painted; his hands and nails were purple; the circulation through the heart was very feeble; there were all sorts of râles in the lungs; the lungs were enormously congested, and the heart-beats were very much embarrassed, so that the natural sounds could hardly be heard. I said to the Doctor, "This sudden occurrence of dyspnœa and this very purple face can only be accounted for by the fact that the right auricle is filled up with something, and nothing can fill it up, that I know of, except a coagulation." I was led to that conclusion because he had had two coagulations before—one in each femoral vein. Well, he suffered from intense dyspnœa, and both of us thought he would die, but he lived on day after day, and became better rather than worse, and after some time he was able to get up, and within a year I met him in the street, and he said, "Well, Doctor, I can go up the ladders now (he was a builder by occupation);" and he looked very well. Now what happened in him? I have very little doubt that a coagulation occurred within the heart, as before mentioned.

Then coagulation does take place during life sometimes. Its manifestation is pretty severe, and you can hardly misunderstand it. The fact that it is not recognized in as many as one in several thousand cases of persons to whom the doctor is called is evidence enough that it is of rare occurrence.

I have now to describe to you a disease, or a diseased condition, which was first observed by myself; a new disease. On the 13th of June, 1869, I was called to see a gentleman whom I found extremely restless, with a small and feeble pulse, and on visiting him the second time I found the pulse was rapidly growing infrequent. He had a restlessness that one can hardly describe; no position seemed to satisfy him. He lay down, he was not content with the position; he sat up, he was no more content; he leaned back on his elbows with his head raised a little from the bed, he was no better satisfied; there was no position in which he could get and be at all at ease. His face was very pale and rather pinched; the brain was pretty fairly active, but perhaps not so active as natural. It was not difficult to recognize a failing in the action of the heart, but the cause of it was beyond my perception. I was able to say there was a growing paralysis of the heart. Now mark four particular striking features of it: a small, infrequent pulse; marked paleness of countenance; pulse growing less and less frequent; and extreme uneasiness in regard to position. Now, if you will look through the catalogue of diseases, and note those in which the pulse is small, you will find always that it is rapid; the pulse is in no instance spoken of as small, feeble, and growing less and less frequent every quarter of an hour. This gentleman died. At the post-mortem examination it was found that there had been a mass of vegetation forming upon one of the valves, I have forgotten which one, and it does not matter for our present purpose; a portion of it had been detached by the current of blood in the heart, and had been forced into one of the coronary arteries and plugged it up. The result was, less and less action of the heart for a period of fourteen to eighteen hours, and then death. The paralysis of the heart, as I said, was easily enough recognized, but the cause of it we could not determine until after death. I do not know of any paralysis of the heart aside from cutting of the nerves that supply it that at all resembles it except that which occurs in diphtheria, or after it. The heart in the latter instance becomes paralyzed, but the pulse does not become infrequent; it will have its normal frequency at least, while in this case it fell down to about thirty, then to about twenty-five, and then to twenty in a minute.

About two years afterward I was called to see a certain gentleman, and as I entered the room he said, "I cannot see." His perceptions were pretty clear. He was lying flat upon his back, and he exhibited a good deal of the restlessness of the other case, but not so much. When I saw him I was unable to find the pulse in the wrist, but found it in the carotid artery, and it was very slow and very small. I was enabled in that

case to say, of a truth, "here is paralysis of the heart, but the cause is unrevealed." After his death the heart was examined, and exactly the same thing was found as in the former case; the coronary artery was plugged up near its entrance into the walls of the heart by a portion of vegetation that had formed on one of the valves of the heart, and had become detached and carried by the current to its lodging place.

The third case was a doctor of this city, aged seventy-two; and these gentlemen were all old men. I was called to him in the afternoon of a certain day. Dr. Lindsley was his physician. I found that paleness with restlessness, that infrequent and small pulse, and I said to the Doctor, "here is a recent plugging of one of the coronary arteries of the heart," and it so turned out. After his death the heart was examined, and a plug of the same sort as those before mentioned was found in one of the coronary arteries. That was in 1873. Within the last two years two or three similar cases have been reported, but I put out my patent by publishing a general statement in regard to the possibility of such an accident in Johnson's Encyclopædia, five, six, or seven years ago.

The coronary arteries are given off from the aorta behind the curtain of the aortic valves, and almost always, when the ventricle is contracting, these curtains lie up against the opening of the coronary arteries, and cover them, close them, so that during the systole of the heart no blood can enter them. But during the heart's diastole the aortic valves are closed by the weight of the column of blood within the artery; they shut in toward the centre of the aorta, and leave the mouth of the coronary arteries wide open, and the blood is forced into them at that time. Hence, when an embolus comes out of the heart it naturally goes past the opening in the coronary arteries, and hence we have embolism of the spleen, of the kidneys, of the brain frequently, as compared with embolism of the heart. It is only an embolus that comes back with the reflux of the blood that can enter the coronary artery. But that such an accident can occur, these three cases fully attest. I remember another case reported of the same acute disease, and still another of a chronic affection of the coronary arteries of the heart. The sudden occurrence of this accident has a very different effect from a gradual growing obstruction of the coronary artery. The latter occasionally occurs from a thrombosis or calcareous degeneration. In the slow closing up of one of these arteries there is sufficient anastomosis between the two to enable the branches of the artery that is losing its calibre to receive blood from the other, and the disease is chronic in that case. It is only when the obstruction is suddenly produced that you will get this particular kind of heart-beat and pulse, and I believe that the four symptoms which I named to you are diagnostic of the affection. You may not meet with such a case in your whole lifetime, but at the same time it is some satisfaction to know that there is such a thing, and that it can be distinguished.

I know of nothing that will have much effect upon these embolisms, or upon these coagulations. One word, however, with reference to the phosphate of iron and soda. The phosphate of soda is said to be the salt that keeps the fibrine in solution in the circulating blood, and it is with the hope that it will have this effect that it is given to patients in whom there is this tendency to coagulation; and as they need strengthening also, the phosphate of iron is added. But in the accident to the heart referred to, there does not seem to be any possible way of obviating it. The embolism is impacted into the coronary artery—in the cases referred to near its base; it was too large to go down further, else it would not have produced those effects. It might produce myocarditis if it were forced down to some of the smaller branches, but not loss of power in the heart, or, in other words, paralysis.

Communications.

DEAFNESS AS THE RESULT OF THE POISON OF SYPHILIS.

BY LAURENCE TURNBULL, M.D., PH.G.,

Aural Surgeon to Jefferson Medical College Hospital, Philadelphia.

(*Continued from page* 510, *December* 11*th*, 1880.)

CLINICAL CASES.

Case of Heredito-syphilitic Disease. No Relief to Her Hearing from Treatment, but Much Improved by the Use of Auricles.

CASE 1.—F. M., aged seventeen; at school; applied March 27th, 1880. She looks bright, intelligent, but her mother states her health is not good; suffers from an eruption and pain at the nape of the neck; has a peculiar nasal voice, notched teeth. and wears glasses, from former disease of the eyes. Both ears affected; the duration is stated only to have been eight years, but the eye affected from childhood was almost blind; then she became deaf, when the eyes became better. The deafness was not sudden, but

gradual; she became worse and worse. Has no discharge from ear, no pain; singing noises; meatus dry. Previous treatment of ear, glycerine and syringing. Both membrana tympani opaque, thickened and sunken; no fluid in middle ear or tympanum. Loud watch not heard on contact with any part of the ear. Tuning fork heard on forehead. Voice close to ear, in a very loud tone. Acoumeter of Politzer only heard when the metallic button is placed in contact with the bones of the head. Tones of piano not heard. She has ulceration of nose and swollen mucous membrane of turbinated bones. Is subject to hoarseness; the whole surface of the soft palate, pharynx and tonsils covered with a fine network of bright blood vessels. No member of her family deaf. Diagnosis, heredito-syphilitic deafness. This was subsequently confirmed by a confession from the father. The nose, throat, pains in the head, etc., were treated by iodide and bromide of potassium, with tonics, until she was perfectly well and remained so for nine months, when she had a slight relapse, the eruption showing itself. Then she was ordered "Zittman's decoction" and sulphur baths. To relieve her deafness when in society she uses her auricles, and she can enjoy her music with them, as she is a good performer; but prior to the use of these helps to her hearing she had no pleasure in her music.

It is at times very difficult to make the diagnosis of syphilis when the history is not complete, or when the parties deny all knowledge, or they do not know what has produced the results, as the following well illustrates:—

Case 2.—A lady, fifty-nine years of age, placed by her position beyond all ordinary causes of syphilitic contagion, presented herself for examination, complaining of a slight sore throat, dating back more than a fortnight. There were sharp pains felt at the moment of swallowing, and a considerable glandular swelling situated at the angle of the jaw on the right side. Upon examining the throat there were observed upon the tonsil of the same side an ulcer the size of a three-cent piece, superficial, slightly excavated, and covered with a grayish secretion. The mucous membrane around this ulceration was œdematous, and formed like a cushion. No other lesion was found in the buccal mucous membrane, or in the isthmus of the fauces. The ganglia of the parotid region were voluminous and painful, and extending to the middle ear; redness of the skin existed, however. With this exception the patient complained of no trouble in her general health, and seemed to attach but little importance to the disease from which she suffered. Knowing this patient's manner of life, I was unable to suspect syphilis; nevertheless, at the end of some days a roseola made its appearance, which permitted no doubt as to the existence of syphilis, of which the ulcer in the throat was the primitive lesion.

The difficult question of etiology remained. After much research it was learned that the patient, having received into her house a child raised on the bottle, had the habit of often aspirating the instrument, to ascertain the temperature of the milk, by means of the rubber mouth piece. Now it was learned that the child thus nourished was affected with hereditary syphilis, with multiple lesions of the mouth and genital parts.

Keratitis, Parenchymatose; Otitis Media, Catarrhal, and Otitis Interna; Heredito-syphilitica; Recovery.

Case 3.—A. S., aged thirteen, was brought by her aunt and accompanied by her physician, May 9th, 1877. She is a bright girl, fair complexion and blue eyes; she has been at school, but, owing to her deafness, is unable to go on with her studies. Her mother is dead, father living. Her general health fair, not strong; both ears affected, but the right one worse than the left. The severe deafness followed the improvement in her eyes. She has keratitis, and she has been very deaf for eighteen months. She had her keratitis two years ago, and was under the care of an oculist. She employs glasses. Has no pain, no discharge from the ears; has ringing tinnitus. Meatus is dry and narrowed; membranes opaque, white, and malleus retracted. Eustachian tubes open, but so narrowed as to admit but little air.

H.D.R.E. $\frac{3\frac{1}{2}}{25}$ inches feet watch.

H.D.L.E. 20 inches.

Speech only heard in a loud tone; cannot hear a whisper in right ear. Tuning fork not heard on temporal bones, nor mastoid or occipital. Nostrils swollen, inflamed, and have a mucous discharge. There is a history of hereditary syphilis communicated from father to mother. Previous treatment a full course of bichloride of mercury followed by tonics. The incisor teeth are serrated and notched, as described by Hutchinson.*

After a protracted course of treatment of the catarrhal otitis, and constitutional treatment, by means of biniodide of mercury and iodide of potassium, increasing the dose until she took one hundred grains of the latter a day, in solution in water, and extract of glycyrrhiza, use of Siegle's

* The teeth here alluded to have been described by Dr. Hutchinson as characteristic of hereditary syphilis, but must not be confounded with those who have

Pneumatic Speculum, exhausted, to the membrana tympani, opening the Eustachian tube, etc., use of galvanic electricity, etc., the following was her condition:—

March 1, 1878. Membrana tympani on both sides still opaque, but moves better by inflation. I am satisfied there are some old cicatricial conditions of Eustachian tubes, which have, in part, been overcome. The hearing has improved in her bad ear to forty inches, and the left continued about the same. She is well in health, and able to resume her studies. She had during her treatment a number of relapses, but for some years has been quite free from them. Her cornea is still opaque, with some increase of her myopia; her glasses had to be of a higher power. She improved in hearing; the voice, however, was of great importance to her, as she is fitting herself to be a teacher. Has had no return of her severe deafness for three years. Otitis media purulenta cured, and returned with otitis media specifica also cured.

Case 4.—This patient, William B., aged thirty-two years, came to the Jefferson College Hospital Ear Clinic, May 3, 1879, for acute otitis media purulenta in left ear, and after some weeks' treatment was discharged cured. He subsequently contracted syphilis, followed by a fresh discharge, June, 1880, with perforation, which at first was treated as the one previously, but it would not heal until he was placed on specific treatment. I append the notes of my assistant, to whom he applied privately, after contracting the syphilis:—

William B., a barber by occupation, mulatto. Can find no history of syphilis antedating his first attack of ear trouble. On October 8, 1879, my note states he had been feeling badly for some time, and had a soft sore, which I cauterized with acid nitrite of mercury. Placed him on hyd. proto. iod., gr. ¼ ter in die, then on hyd. bichloridi and potassium iodide. On February 21, 1880, came back much broken down, mucous patches in throat and mouth, no appetite and emaciated. Applied diluted acid nit. mercury, and gave hyd. bichloridi and potassii iodid. Saw patient last time in March.

had mercury administered in infancy, producing defective teeth from mercurial stomatitis, as follows:—

Defective Teeth from Mercurial Stomatitis.	*Defective Teeth from Hereditary Syphilis.*
TEETH PRIMARILY AFFECTED.	
1st molars.	Central upper incisors.
CHARACTER OF ABNORMALITY.	
Promolascope.	Peculiar *notch* in incisors;
Enameldeficient; tranverse lines on incisors and canines; dirty, discolored, coated with tartar and pitted.	dirty; badly formed; often deficient in enamel and dentine; nasal voice, or lisp, with curious difficulty in pronunciation.

Second visit to Jefferson College Hospital. Condition of ear, etc.:—

Left ear. Hearing distance $\frac{6}{20}$. Pus in meatus. No pain. Tinnitus of rumbling character. Left membrana tympani perforated. Eustachian tube open. Duration two months. Diagnosis, otitis media purulenta. Treatment: cleansing with warm water and sodii bromis, followed by acid carbolic and zinc sulphas in solution.

July 14th. Applied powdered alumen and iodoform.

August 4th. Very little discharge.

September 1st. Almost no discharge.

September 10th. Washed and applied absorbent cotton.

September 9th–11th. Washed and applied absorbent cotton.

September 9th–13th. Left H.D. $\frac{1}{20}$.

Returned with an acute attack of myringitis in right ear, which was relieved by morphia internally, and scarifications of the membrana tympani. While under treatment the left ear again discharged, and the perforation opened afresh; there was applied absorbent cotton, to cleanse the parts, and iodoform and tannic acid in fine powder, with the internal use of biniodide of mercury with tonics. In the course of four weeks the discharge ceased, and perforation healed. H.D. restored to about the same as before his acute attack, and his eyes gave him some trouble. He was referred to the ophthalmic department.

After recording the above case a reprint of three cases, with remarks, was sent to the writer by Dr. Sturgis, of New York, "On the affections of the middle ear during the early stages of syphilis." His cases did not correspond with mine, as to the uniform appearance of the membrana tympani, and the nocturnal character of the pain. He observes, p. 3, "One symptom, however, although not pathognomonic, is yet sufficient to cause suspicion and lead to careful questioning as to syphilis. It is the infiltration of the membrana tympani, conjoined with absence of vascular congestion or acute inflammation."

In the first case, he describes the membrana tympani as "sunken, succulent looking, opaque, without any light spot; the drumhead looked as though infiltrated with fluid." It will be noticed that in almost all the cases above described, by myself and authors quoted, the membrane was white, opaque and dry, except in the detailed case, 3d. His second series of cases confirms my views in respect to the importance of treating the syphilitic symptoms with specific remedies, for he states, "I believe that we may

pick out the symptoms which are due to syphilis, and those which are due to old otitis media suppurative." I doubted this, and I so expressed my views in a letter to the distinguished gentleman, whose experience and opportunities have been very numerous. He sent me a reply, from which I make the following extract:—

"From what I have seen I incline to think that in these affections of the ear, in early syphilis, the membrana tympani is more often succulent, infiltrated, if you please, than is generally believed."

To test this proposition I directed one of my clinical assistants at Jefferson Medical College Hospital to examine the record books for cases of syphilitic disease of the ear, and the following is his report:—

"In the first five hundred cases of disease of the ear there were eight cases of specific disease; and the appearance of the membrana tympani were as follows: No. 201, in Record Book No. 2, membrana tympani perforated, swollen, and infiltrated. No. 202, in Record Book No. 2, perforated and infiltrated. No. 201, in Record Book No. 2, dry and opaque. No. 218, in Record Book No. 3, perforated and infiltrated; swollen. No. 221, in Record Book No. 3, not given. No. 225, in Record Book No. 3, membrana dry and white as paper. No. 233, in Record Book No. 3, opaque, dry, with lines upon it. No. 473, in Record Book No. 6, inflamed and thickened, sunken, peculiar nasal voice; teeth characteristic of hereditary syphilis. From 500 to 850, six cases. No. 533, in Record Book No. 7, membrana tympani opaque, thickened, and sunken. No. 606, left membrana tympani not seen, on account of condylomata filling up the meatus. Right white, dry, and small perforation. No. 661, right membrana tympani perforated. Left, thickened, opaque, sunken, dry. No. 721, membrana tympani sunken, handle adherent, crescentic-shaped spot of calcareous degeneration in anterior segment. No. 735, membrana tympani sunken, opaque, and adherent. Left, opaque, adherent, with deposit and adhesion of handle of malleus. No. 748, right membrana tympani sunken, silvery reflex. Left, not so much opacity, more natural reflex. No. 838, membrana tympani, right, congested around the edges, umbo or light spot seen, but out of its natural position. Left, opaque, handle of the malleus prominent and twisted."

It will be noticed that in the fourteen cases, the majority of them, when the membrani tympani is not perforated, the appearance is dry, opaque and sunken; second, in all cases of perforation, when a part of the membrane is in situ, the membrane is more or less swollen and infiltrated with pus or serum.

PATHOLOGY.

The pathology of the various forms of changes in the ear produced by syphilis is a matter of great importance, and should be dwelt upon.

Voltolini (*Virchow's Archiv*, Bd. XVII, Section 8) observed hyperæmia in the vestibule, in the beginning of the cochlea and horizontal, semicircular canal, in a case of tympanic catarrh and probable periostitis in a syphilitic person.

Gruber (*Lehrbuch der Ohrenkrankheilkunde*, p. 617) found in a syphilitic soldier, who died of exanthematic typhus, considerable hyperæmia of the tympanic mucous membrane and membranous labyrinth, which appeared to be a good deal thickened. The labyrinthine liquid was sanguinolent and abundant.

S. Moos (*Arch. Ophthalmology and Otology*, vol. III, No. 4.) observed total deafness on right side. Myringitis, anchylosis of the ossicles, with adhesive inflammation in the labyrinth, with depositions of chalky concretions on the membranous semicircular canals and sacs. This patient was a seamstress, aged forty-nine. Old clinical diagnosis was encephalopathy, in consequence of secondary syphilis. During six years she had been complaining of pain at the top of the head and parietal region, and of vertigo. Five days before admission into the hospital she had fallen in the street, and could not stand or go about unassisted.

In a paper by Moos (*Virchow's Archiv*, Bd. XIX), is reported a case of secondary syphilis, in which deafness, annoying tinnitus aurium and osteocopic pains in the skull were complained of. The hearing was rapidly destroyed. The autopsy showed the external and middle ear intact, sclerosis of the petrous portion of the temporal bone, periostitis in the vestibule, and small-celled infiltration of the membranous labyrinth, anchylosis of the stapes to the fenestra ovalis. The trunk of the acoustic nerve was found unchanged.

Zaufal found a purulent inflammation of both ears, with perforation of both membranes, in a new-born child with congenital syphilis. Both perforations were below the manubrium, so that they could not be referred to an arrest of development.

Schwartze mentions, in his historical review of the literature on syphilitic affections of the ear (*Arch. f. Ohrenh.*, IV, p. 258, etc. 1869), that purulent otitis me[illegible] of [illegible]ito-syphilitic infants is often rapidly ca[illegible]

Hinton dissected the petrous bones in one syphilitic case and found a congested state of the tympanic mucous membrane on the right side, and some old adhesions at the upper part of each tympanum, the membrana tympani very concave, the Eustachian tubes containing mucus; each vestibule was much congested.

According to Schwartze (Pathological Anatomy of the Ear, translated by Dr. J. O. Green, p. 46), the ulcers found with constitutional syphilis are annular and covered with a dirty grayish-white exudation, and from their edges being greatly swollen they cause contraction of the meatus, and when they exist the lymph glands in the vicinity of the ear are much swollen.

The serous catarrh (otitis media serosa) is found with syphilis, and is an inflammatory dropsy of the tympanum, of a yellowish-red color. It is the least common, and should not be mistaken for the very simple transudation (hydrops exvacue) which results from closure of the Eustachian tube.

Certain changes in the cerebral have been discovered by Huebner Barlow, and these same changes no doubt occur in the arteries which supply the ear, in syphilitic disease of this organ. These changes are opacity and marked thickening of the vessel, with diminution in its calibre. The thickening is chiefly in the inner coat, while the outer coat is abnormally vascular and filtrated. Charcot and Gombault describe a syphilitic lesion of the brain substance, which consists in the formation of disseminated small nodules, either on the surface or at the depth of nerve centres.

The ulcers of the Eustachian tubes, in syphilis, which extend from the pharyngeal mucous membrane, are much deeper, reaching the cartilage itself, and even penetrating its substance. Syphilitic excrescences, like the pointed condylomata, are sometimes seen at the osteum pharyngeum (Schwartze).

Syphilitic mucous patches on the tonsils, when examined under the microscope, show the latter to be seated upon the mucous membrane which covers the gland. The epithelial layer was thickened; some of the superficial epitheliæ were swollen and vascular; the papillæ of the mucous corium beneath were hypertrophied. It is to the hypertrophy that the prominence of the patches is due. The more profound syphilitic lesions of the mucous membrane begin by an induration of the corium and of the submucous tissue by deep nodules or gummata, which very soon ulcer[illegible] careful examination it will be found that the syphilitic disease affects the most vital portion of the internal ear (the labyrinth), which becomes thickened in its membranous covering, and the fluid which it contains is bloody and increased in quantity. This accounts for the profound deafness. Second, we have the semicircular canals hyperæmic, with deposit of chalk concretions on the membranous portion of these canals, which accounts for the staggering gait of the patient, or a tendency to fall. Third, we have alterations in the bone structure which contains the most important and delicate parts of the ear, the petrous portion of the temple bone. Fourth, we have anchylosis of the stapes to the walls of the fenestra ovalis, so that it has no power to move by the impulse of sonorous vibrations, which are conveyed in mass and not in musical tones.

In syphilitic necroses of flat bones there is a new osseous formation which takes place at the edges, and in cases sequestra, as a watch glass. The diploë of the bones become more compact, and upon their external surface small hyperostoses are met with. A microscopical examination of the sequestra shows the medullary cavities of the diploë replaced by very narrow canals, and the transformation has taken place in consequence of the formation of osseous tissue which, being deposited, layer by layer, in the interior of the canals, has narrowed them. The purulent inflammation of both ears, with perforation, or evidences of the same, in new born children, the result of congenital syphilis, accounts for many of the cases of congenital deaf mutism. The dropsy and changes in the membrana tympani account for its white and dried character and appearance. The deep-seated ulcers in the Eustachian tube, unless very promptly treated, must, in a very short time, destroy the function of this important part of the ear. While the pointed condylomata destroy and contract the meatus, unfitting it for the reception of sonorous vibrations.

PROGNOSIS.

The prognosis in these affections of the ear depends almost entirely upon the stage at which the patient is suffering from the syphilis, and also the duration of the disease. In primary and secondary manifestions much benefit will result from a careful and active treatment, both local and general. In the tertiary cases among the poor the prospect is very unfavorable, while with the wealthy, and even those having all the comforts of home, proper food and attention, most cases will recover if brought to the aural surgeon in the early stage and while the general health is still good.

TREATMENT.

Condylomata of the external auditory meatus are uncommon. One of the earliest notices of such a difficulty was described by Sir William Wilde,* of Dublin. A female, aged 25, suffers from deafness, tinnitus, occasional pain, fetid and sometimes bloody discharge from her left ear, for eight months. The internal meatus is completely closed by several condylomata which grow around the margin, but particularly from its lower edge. They are sensitive to the touch, lobulated on their surface, project beyond the margin of the aperture, and are a little more florid in color than the natural skin. When the tragus is pressed backward a muco-purulent discharge exudes between these growths.

The excrescences were touched with nitrate of silver, after which a poultice was applied. The subsequent treatment consisted in washing over the morbid growths with a strong solution of nitrate of silver every second or third day, and in the intermediate time keeping a dossil of fine lint wet with diluted liquor plumbi applied to the concha, besides the internal administration of Plummer's pill and sarsparilla. By persisting in this treatment for upward of two months the condylomata disappeared, leaving the meatus natural, when the membrana tympani was found unimpaired and the hearing was restored. A. Stöhr† published, in 1870, a paper on the formation of broad condylomata in the external meatus. As resident assistant physician to the large hospital at Wurzburg he observed fourteen cases of broad condylomata in the ear canals of syphilitic patients, eleven of which were females. The disease occurred mostly on one side only, and in persons whose ear canals were narrow. It began in the depth of the meatus as red patches, which developed into slight elevations (papulæ) and well marked condylomata.

Complications with severe affections of the middle ear and rupture of the drum membrane are not mentioned, but they do occur, as I have witnessed in my own practice four out of eight cases and in that of others. The condylomata were cured by Dr. Stöhr‡ in the course of one or two months. Relapses were noticed in three cases, together with relapses of other symptoms of syphilis, about six weeks after the appearance of the affection. All the patients regained good hearing. Mild cases were cured by constitutional treatment *alone;* severe cases required local treatment additionally, namely, abscission of the prominent excrescences, cautious touching of the deeper ones with nitrate of silver in substance, and the most careful cleansing with weak solution of acetate of zinc and hypermanganate and chlorate of potash.

In my treatment of condylomata situated in the external meatus, or on the edge of the membrana tympani, or in the throat—the latter being the locality in which I have most frequently found them to occur—I employ nitrate of mercury, in solution of one part to twelve of water, applied to the part, so as to destroy not only the superficial covering but the deeper diseased tissue. I wash the parts with lime water and calomel. I also apply a dossil of lint with powdered iodoform and tannic acid to the meatus. Of constitutional measures I prefer the hypodermic injection of the bichloride of mercury or the biniodide compound solution,* which I have employed with the most happy results. If the weather is cool or damp, care should be taken to have the patient well covered with warm clothing, and he should have a full meat diet, avoiding green vegetables or acid fruits, and employing tonics to keep up the system. In the treatment of what is now known as "Hereditosyphilitic affections of the ear associated with eye affections, to which a reference has already been made, and which comprises much the largest number of cases—which are almost all the result of the disease being received by the mother and transmitted to the child—it is in this class of cases that almost all of them have some affection of the eyes; in sixteen, six had at one time keratitis, and were liable at times to relapses. There cannot be a doubt in my own mind that there must be a pathological reflex relation between the eye and ear. This may be through the medium of the trigeminus, as suggested by Dr. Dransart (*Le Progrès Médical*), who reports four cases bearing upon the above subject, viz: (1) A tinker lost his right eye in 1870, by a wound from a fragment of iron, producing traumatic cataract; as a result of this accident he became deaf in the right ear. In 1880 he received a similar fragment in the

* "Practical Observations on Aural Surgery," Philadelphia, 1853, p. 202.

† *Arch. f. Ohren.*, p. 130, 137, quoted by H. Knapp, *Arch. of Otology*, July, 1879, p. 166.

‡ Op. cit., p. 167.

* ℞. Red iodide of mercury, grs. xvss
Iodide of potassium, ʒj-ʒv
Distilled water, f.ʒj-f.ʒvj. M.

Dissolve and filter, then add simple syrup until the whole measures fifty fluid ounces.

The dose of this is a tablespoonful, containing one-seventh of a grain of the red iodide of mercury, and seven and three-quarters grains of the iodide of potassium, which may be given three times a day. This preparation, says the late Dr. F. F. Maury, of Philadelphia, has never been known to salivate a patient, and is the best form of administering mercury in chronic syphilitic taint.

left eye, and he became deaf in the left ear. He was an alcoholic subject. (2) A child, aged twelve, was struck by a snow-ball in the right eye; he became deaf in the right ear. Father and mother were syphilitic. (3) A girl, aged eighteen, scrofulous, deaf and almost blind; multiple lesions of the sclerotic, cornea and iris; double iridectomy; sight was restored to the patient and hearing improved. (4) A girl, aged eight, deaf, ocular lesion; iridectomy, amelioration of vision, and diminution of deafness with reserve. There exists a pathological reflex relation between the eye and ear, as we have before explained. This relation, which takes place through the medium of the trigeminus, is such that a wound of the eye may induce deafness, or may ameliorate a deafness already existing. This relation operates preferably under certain pathological conditions, such as syphilis, alcoholism, lymphatism and scrofula.

There is also a ready connection between the eye and the throat, through the duct and lachrymal canal to the nose, thence along the Eustachian tube to the middle ear, and then extension to the labyrinth. In this class of cases, if mercury has not been employed, a fair, careful trial must be made with it, in the form of the hyd. cum cretæ, with small quantity of opium, with children, or even calomel, well guarded; or the use of mercurial ointment; or still better, the oleate of mercury by inunction, followed by syrup of iodide of iron and nourishing diet. The patient usually states that the giddiness and deafness which follows the eye affection is very sudden, but by careful inquiry it will be found that there was some anterior deafness. If we have found that the patient has been fully under the influence of the mercurial for a considerable time, then we must resort to the iodide of potassium in large doses, kept up for months, while, under all circumstances, the local treatment of the catarrhal deafness must be attended to. For the dizziness, resort must be had to the bromides, quinine and the hydrobromic acid, being careful not to induce dyspepsia by their use.

CONCLUSIONS.

First. That syphilitic diseases of the ear are less numerous in the United States than in Great Britain, or Europe, and that it is not so frequently a cause of deaf muteism. Yet there are cases of this affection.

Second. In almost all constitutional syphilitic disease of the ear in children and young persons it is associated with some affection of the eyes, throat and nose. The deafness which often follows the improvement in the eyes is sometimes profound.

Third. Persons who have suffered from constitutional syphilis, especially young persons and children, have great impairment of the hearing tones through the bones of the head.

Fourth. In a few cases the first indication of syphilitic diseased ear is a primary ulcer in the throat, naso-pharyngeal space, or in the auditory canal, or near the membrana tympani.

Fifth. Purulent otitis media, or otitis media serosa syphilitica, may occur in utero, or very young infants, while in young persons and adults we may have congestion of the tympanic mucous membrane from the same cause, anchylosis of the bones of the ear, with bands of adhesion in the middle ear, by extension from the throat to the Eustachian tubes.

Sixth. Syphilitic disease may affect the most vital part of the internal ear, labyrinth, semicircular canals and cochlea, with marked thickening and dryness of the membranes of the round and oval windows and vessels which supply the internal ear. There is also disease of syphilitic nature in the auditory nerve, also the brain itself, in the formation of disseminated small nodules within the nerve centres.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

SERVICE OF PROF. D. HAYES AGNEW.

Reported by GUY HINSDALE, M.D.

Popliteal Aneurism. Cure by Pressure.

CASE 1.—May 18th, 1881. This man, sixty years of age, has a swelling in his ham. He says it made its appearance over a year ago. It is impossible to get from him any definite history of his injury. He says he has been a farmer. We will, however, fathom this thing from the appearances themselves, independently of any history.

The limb is œdematous, and pressure with the fingers leaves a visible indentation. Placing my hand on the tumor I find pulsation—a pulsation synchronous with the pulse—but which ceases when I make pressure on the femoral artery; the tumor also flattens and becomes soft, but as I withdraw my hand and relax the pressure, the tumor rebounds, and the throbbing is renewed. On applying my ear I find a sound, a very distinct and loud *bruit*. We have an aneurism of the popliteal artery. This artery is very liable to be attacked by aneurism, the arch of the aorta alone being a more frequent seat of this affection.

The formation of aneurism may be gradual, and the dilatation of the artery be uniform in its whole circumference. When all of the coats are ruptured the aneurism is said to be false or

diffuse; but we usually have only one or two coats involved.

In regard to treatment there are two plans to pursue. We may ligate the femoral artery or attempt the same results by pressure.

If we should cut into this sac we should doubtless find dense fibrin, having a very distinct, laminated structure. In tubular or spindle-shaped aneurism we do not so often find these fibrinous laminæ, for the contents of such a cavity would be more directly under the influence of the blood current. Fusiform aneurisms are, therefore, confessedly difficult to treat.

If we tie the vessel higher up, and allow a clot to form, there would be some risk to the patient. Our course should, therefore, be to use pressure first, and afterward, should this fail, to resort to ligation. I am surprised that persons are so ready to advocate the ligature, for pressure, when faithfully tried, rarely fails. This method has the advantage of first preparing the patient for the ligature, should that be necessary; the collateral vessels become gradually dilated, and are, consequently, able to supply the limb below with blood. It is not necessary to cut off all the blood, but just so much as to make the pulse faint. In this way we obtain better results: the clot is firmer and more secure. When, on the other hand, the blood is absolutely arrested, the clot is soft and may be channeled through by the force of the blood current.

We will place this man at rest, give him a low diet, and begin a course of treatment that will lessen the force and frequency of the circulation, ordering for these objects one to two drops of tr. veratrum viride, and seven to eight grains of potassium iodide. After continuing this treatment for a few days, keeping him at perfect rest, we will be ready for the operation.

It will be necessary to draw upon the class for assistance. The pressure must be made constantly, and not spasmodically; we must have assistants who can relieve one another every ten or fifteen minutes, for few people can exert the proper degree of pressure longer than that time. The force can be applied with the greatest certainty either by placing two fingers of one hand over the vessel, and planting upon them the flexed index finger resting against the thumb of the other hand, or by using the two thumbs one on top of the other. The pressure must be made until an assistant, with his hand placed over the aneurism, announces that pulsation has ceased. When the time comes for one assistant to be relieved, the artery must be commanded before he removes his fingers. Dusting the skin with powdered starch or prepared chalk will prevent excoriation, and a hypodermic injection of morphia will enable the patient to endure the treatment if it should be painful. I have little faith in instrumental pressure.

We will expect to cure this case in from twenty-four hours to three days, and will, therefore, be able to give you an opportunity to acquaint yourselves practically with all points in the treatment—a most valuable experience.

Note.—Pressure was made, without interruption, for twelve hours. At the end of thirty-six hours, pressure having been suspended during a portion of the time, pulsation had ceased.

June 24th. None of the signs of aneurism have returned and the cure is complete.

Popliteal Aneurism. Cure by Ligation.

Case 2.—May 25th, 1881. We have, to day, another case of aneurism of the popliteal artery. The patient is a colored man, forty years of age, and a gardener by occupation. He thinks he can trace the trouble to a slip which he made about a year ago, in jumping out of a ditch, and he says that during the last four or five months the swelling has been slowly but steadily increasing.

The causes of aneurism are different. In the vast majority of cases there is present a vice of the vascular system, an atheromatous degeneration which weakens the walls of the arteries. I believe that intemperance is the most prolific cause of the development of arterial degeneration. It is the prevailing opinion throughout the profession, that constitutional syphilis is a fruitful source of aneurism. Our knowledge, however, of the relation between syphilitic poison and arterial degeneration, is entirely too meagre to warrant any hasty generalizations on this point. Besides these predisposing causes, we have exciting causes. Great violence may produce strains in the coats of an artery, or may produce a curve or an angle in its direction, from which an aneurism may result. Even the blood current itself, quickened by emotional states of the heart, may, by the increased tension of the vessels, excite aneurismal dilatation. Consequently, the aorta, from its nearness to the heart and the existence of an arch, or curve, particularly suffers from such influences.

In regard to the varieties of aneurism, we class them as true or false; true, when the blood is contained in a sac formed by one or more of the coats of the affected vessel, and false, when it escapes from the artery into the surrounding tissues, either in consequence of a wound in the vessel, or from rupture of an aneurismal sac. In this last instance the true aneurism becomes false. The sac may reinforce itself by becoming united to contiguous parts, and remain in this way unchanged for a long time; a limiting wall is formed from the condensation of the walls, and in cases of false aneurism, where the sac has ruptured, and the contents have been discharged into the surrounding tissues, the formation of such a wall is a most providential safeguard. We have also, among the false aneurisms, the dissecting aneurism.

But how are we to distinguish an aneurism? With such decisive methods of diagnosis at our command, it seems almost impossible that any error should be committed as to the nature of the disease; and yet some of the most eminent surgeons have made fatal blunders in this regard; indeed, within the last ten years, I have seen no less than three such errors, all of which proved fatal. In other cases, operations have been undertaken for the cure of aneurism, and the tumor has proved to be of an entirely different nature. Earle ligated the subclavian artery for what was supposed to be an axillary aneurism, but which was found to be a neuroma.

The swellings with which aneurism may be confounded are abscess, encephaloid disease, solid tumors, erectile growths, and cysts. Ab-

scess and aneurism are both round or oval in form; both present to the touch a degree of hardness or of softness; both may pulsate and both may communicate a sound to the ear. In abscess we have usually a previous history of inflammation, manifested by throbbing pain, heat, redness and swelling. But in aneurism there is no throbbing pain, the surface of the tumor is not tender, and excepting where it is very large and the walls are thinned out, neither is there any redness. The swelling of an abscess, as it increases, tends to become pointed, and at the summit it has a purple color. Except in rare cases, aneurism never presents these signs, nor is it ever attended with rigors, chills, and sweatings. In abscess the pulsation, when present, being due to an underlying vessel, will consist in a simple upheaval or rising and falling of the entire swelling; in aneurism the pulsation will be expansile; we seem to feel a living thing, acting in all directions; the tumor cannot be dislodged from its position by manipulation, so as to stop its beat. In aneurism the bruit in the tumor is loud, blowing, rasping and whirring, whereas, in abscess, the sound communicated from the artery to the swelling may have, in consequence of the pressure, a blowing character, but never the thrill or purr of aneurism, the sound being generally transmitted as a dull, concentrated stroke. In aneurism, finally, apply pressure on the artery above the tumor, and you will cause the swelling to subside and the thrill to disappear, both becoming instantly apparent on the removal of the pressure; on the other hand, apply the pressure below, upon the distal side, and the distention and size of the tumor will increase.

When I press on the femoral artery of this patient the pulsation stops, the aneurism flattens down, and it is not so tense; but as I relax the pressure the tumor immediately rebounds. There is no change in the color of the skin. But the most crucial of all the tests that can be applied is with the ear. I have no hesitation in saying, from the unmistakable sounds present in this case, that we are dealing with an aneurism. In every case of mistake, from Desault down, the surgeon did not make the test with the ear.

But you may have an abscess and aneurism coexisting, the tissues external to the latter being the seat of suppuration, and the inflammatory condition being the result of the irritation from the presence of the aneurism. In such a case a strict inquiry should be instituted to ascertain whether, previous to the condition which betokens the presence of suppuration, there existed a tumor; and, if so, whether it was a pulsating one. The ear should always be employed to learn if any aneurismal sounds are present. Last of all, you have that final test, the exploring needle.

The treatment of this patient will consist of compression, the same as in the other case. If we fail, we will resort to the ligature. Compression, as I said before, is no disadvantage; it is rather favorable for ligation afterward. We will give this man, for the first few days, small doses of veratrum viride and administer iodide of potassium.

NOTE.—The number of assistants available being small, Prof. Agnew decided to apply the ligature. This was accordingly done on June 1st, the artery being exposed at the apex of Scarpa's triangle, and secured by the animal thread. At the present date (June 24th) the patient appears to be perfectly well.

EDITORIAL DEPARTMENT.

PERISCOPE.

A Case of Nymphomania Cured by the Removal of Both Ovaries.

The *North Carolina Medical Journal* for June, 1881, contains the following report of a case by T. B. Wilkerson, M.D., Young's X Roads, Granville, N. C.:—

Miss N. P., of Virginia, aged 19 years, of a nervo-sanguine temperament, with a heredity to melancholia on the father's side, a well developed brunette, highly educated, wealthy, having been granted all the luxuries that fond and doting parents could give in an élite society, and adorned with all the graces that beauty and chastity could confer on the female. Menstruation began at fifteen years of age; flow regular for eight or nine months, after which time there was a cessation of the discharge, the patient suffering from the various nervous phenomena ascribable to amenorrhœa. At the age of sixteen years there was a return of the monthly molimen, attended with severe neuralgic dysmenorrhœal symptoms, complaining, prior to each period, of a general malaise, frontal headache, pain under the left breast, dyspeptic eructations, bearing down, weighty sensation in the pelvic cavity, severe lancinating pains over both ovaries, the latter exceedingly sensitive to the touch; deep, dull, uneasy feeling in the sacral region, with an icy coldness extending down the hips and thighs. The continuance of these symptoms did not seem to impair the general health; appetite good, but bowels generally constipated. She was fond of dancing and ever ready to engage in the various innocent amusements of the young, with no marked desire for the company of men, but always maintaining a modest, dignified demeanor. About the age of seventeen she attended a gathering of young people, necessarily being thrown into the society of young men for several days and nights. This excitement seemed to bear heavily on the physical and nervous system, being just prior to one of her monthly periods. After the subsidence of the flux, a noted change was clearly perceptible in the general behavior—the usual vivacity of spirits was gone. She became morose and irritable, easily disturbed by the least noise—complaining

of a dizzy, buzzing feeling in the head. She would frequently break forth from this deep sombreness into wild, hysterical laughter, her conversation lascivious in character, disobedient to parents, finally ignoring mother and father; she became a raving maniac, with the one sexual idea always in the ascendant. There was a destructive tendency manifested toward everything surrounding her. So wild did she become that, moral restraint doing no good, physical restraint had to be employed.

This lady had been subjected to the best medical treatment obtainable for two years, without any benefit accruing. Battey's operation was then proposed, and with the consent of the parents the operation was performed on the 10th of August, 1880. The upper surface of the ovaries presented a pale and corrugated appearance; the lower part was of a deep pinkish hue. The patient reacted well and there was no nausea. Small doses of opium, quinine and carbolic acid were administered, and but little food was allowed for the first forty-eight hours, small pellets of ice being given when desired. The patient was confined principally to a milk diet with lime water during the after treatment. Small quantities of iced champagne occasionally. Wound united by the first intention. No pelvic trouble. She continued to improve, and at the expiration of three weeks had entirely recovered from the effects of the operation. There was a gradual change for the better in the mental condition; this improvement continued, and three months after the date of operation sanity was perfectly restored.

She has remained perfectly well, and is now, nine months after, gay, lively, cheeks ruddy, and in the full enjoyment of a vigorous mental and physical health.

Bullet Wound of the Stomach—Recovery.

Dr. H. M. Pond, of St. Helena, Cal., writes to the San Francisco *Western Lancet*, for June, 1881:—

On Sunday, April 17th, I was called to a patient shot in the abdomen. The bullet wound was two and a half inches above the umbilicus, and one inch to the right of the median line. From information gained as to the position of the parties when the shot was fired, it seemed probable that the ball had passed backward, and slightly downward, and to the right. Beyond ascertaining that the ball had not been turned from its course before entering the abdominal cavity, no probing was attempted. The patient was in a condition of extreme collapse, almost pulseless, and frequently vomiting blood. The unanimous prognosis of the three physicians who saw him was that the wound would certainly prove fatal, either immediately, from shock and hemorrhage, or in a few days, from peritonitis. Hypodermic injections of morphine, to quiet the stomach, and small doses of laudanum and brandy, to aid in procuring reaction, were first administered. In about five hours, as reaction came on, the latter was discontinued. At about midnight I was summoned, to find that my patient had fainted twice, had had a severe chill, and was suffering the most intense pain in the abdomen. The pulse was 140, and hard, temperature high (I neglected to make a memorandum of the number of degrees), intense thirst, nausea, and frequent vomiting, though blood was no longer raised. I regarded this as the onset of general peritonitis. Gave morphine, one-third grain, every hour until the pupil became contracted, and ordered hot turpentine stupes. The next day the pain in the abdomen was circumscribed to the right lumbar region: pulse less frequent, temperature 102°. The morphine was continued in less frequent doses, for the purpose of allaying pain, and keeping the bowels absolutely inactive, if possible, while the diet was restricted to liquid food. The wound in the superficial tissues was kept open by a plug of lint, and frequently syringed after suppuration took place. The patient steadily improved till Wednesday night, when a violent diarrhœa set in. Laudanum was administered in half-teaspoon doses after each passage till the diarrhœa was checked, and in diminished doses thereafter, preventing any further evacuation for several days. The bowels were then allowed to regulate themselves. From this time the improvement was rapid and steady. Two weeks after the shot the first solid food was allowed. The patient's appetite was good, and his digestive powers unimpaired, so that he rapidly regained his strength, and is now (May 10th) able to do light work.

Diagnosis of Yellow Fever for Sanitary Purposes

At the fourth annual meeting of the Louisiana State Medical Society, in March (the New Orleans *Medical and Surgical Journal*, May, 1881) Dr. S. M. Bemiss presented a paper on the above subject, in which he urged the expediency of indicating certain groups of symptoms which shall so far represent yellow fever that the patient shall be isolated and kept in close surveillance until a true verdict can be rendered. The following was adopted without a dissenting vote:—

I. For sanitary purposes the following groups of symptoms shall be considered to indicate yellow fever:—

Group 1st.—A person after (*a*) a sudden attack, has (*b*) a fever of one paroxysm, attended with (*c*) marked congestion or blood stasis of capillaries of surface, conjunctivæ and gums; with (*d*) a history of probable exposure to infection, and (*e*) no history of a previous attack of yellow fever.

Group 2d.—A person after (*a*) a sudden attack has (*b*) a fever of one paroxysm, followed by (*c*) unusual prostration, (*d*) albuminous urine, (*e*) yellowness of conjunctivæ, or skin, and having no positively authenticated history of previous attack of yellow fever.

Group 3d.—A person has (*a*) a fever of one paroxysm, (*b*) albuminous urine, (*c*) black vomit, or (*d*) suppression of urine, (*e*) general hemorrhagic tendency under (*f*) circumstances where exposure to infection is a possibility.

II. Suspicious cases of yellow fever for sanitary purposes.

The following symptoms associated with a fever of one paroxysm in a patient who has apparently been exposed to infection and has never had yellow fever, shall be held to justify in either of the six following cases a suspicion of this disease, viz:—

First. Suddeness of attack, either with violent pain in the head and back, injected eyes and face, or with marked congestion of the superficial capillaries.

Second. Want of that correlation between pulse and temperature usual to other forms of fever.

Third. Albuminous urine.

Fourth. Black vomit.

Fifth. General hemorrhagic tendency.

Sixth. Yellowness of skin.

The following cases shall also be deemed suspicious:—

Seventh. Any case respecting which reputable and experienced physicians disagree as to whether the disease is or is not yellow fever.

Eighth. Any case respecting which efforts are made to conceal its existence, full history and true nature—in violation of Sec. 27, City Ordinance, June 24, 1879.

In the event of death of a suspicious case a post-mortem examination should be made when practicable. Both before and after death, yellow fever is specially and pre eminently characterized by the fact that it is, *par excellence*, a hemorrhagic fever, marked by capillary congestion and its sequelæ; hence post-mortem evidences of a general hemorrhagic tendency in internal organs, especially in the digestive, in preference to the urinary tract, shall be held to confirm the suspicion.

Treatment of Housemaid's Knee by Aspiration.

Dr. H. P. Yeomans writes to the *Canada Lancet*, July 1, 1881:—

A married lady, aged 30, who had noticed a swelling over the patella for a few weeks, applied to me for advice, January 8th. She said her knee felt weak, and pained considerably after ordinary exercise about the house. There was no external soreness or redness, but the bursa was very much enlarged and tense. I prescribed a mixture of iodide of potassium, and an external application of ung. hyd. nit. cum. iod. This treatment was persevered in continuously until March 8th, with no benefit. I then inserted an aspirating needle and removed about an ounce of thick, bloody serum—applied firmly over the patella strips of adhesive plaster, and bandaged the leg tightly. March 18th, fluid again collected in the bursa; had been gradually increasing for two or three days.

March 31st.—Bursa continued to enlarge—felt more painful, and the motion of the knee was interfered with somewhat. Introduced the aspirating needle again and drew off half an ounce of thick, bloody serum, similar in appearance to that obtained at first. I then applied a rubber bandage tightly, and ordered the patient to keep the affected limb at perfect rest. After this no further indications of enlargement presented themselves, and in a short time the patient resumed her accustomed duties, fully restored.

I thought this case worthy of notice because the treatment by external applications frequently fails, while incision sometimes results in the formation of an abscess. Treatment with the aspirator and the judicious application of a rubber bandage, combined with perfect rest for a few days, appears to be the simplest treatment, and the safest and least painful.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"The Management of Wounds" is the subject treated of in a pamphlet of fifty-four pages, by Dr. David Prince, of Jacksonville, Ill. The various methods of treatment are thoroughly discussed.

——We have received a neatly gotten up 12mo volume, of fifty-eight pages, containing a collection of Test Business Problems, prepared by Thomas May Peiree, M.A., Accountant, Expert, and Proprietor of Peirce's College of Business, Philadelphia.

——Dr. George B. Wood Field, of Easton, Penna., sends us, in the form of a reprint from the *Journal of Nervous and Mental Disease*, vol. viii, No. 2, April, 1881, some valuable contributions to the "Physiology of the Spinal Cord and Adjacent Parts."

——In a reprint from the *Indiana Medical Reporter*, Dr. Edward Borck, of St. Louis, Mo., gives directions for "Simple Methods to Staunch Accidental Hemorrhage," with illustrations. He suggests that in all factories, on steamers and along the railroad lines, rubber bandages should be kept on hand, and that a certain number of the employees be instructed how to use them.

——*The Arkansaw Doctor* is the title of a new medical journal which has just made its appearance. It looks extreemly feeble and needs supporting treatment, or it will die in its infancy. On a rich diet, both in the way of subscriptions and contributions, it may grow up to become a power in the land. Time and the inexorable law in nature—*the survival of the fittest*—will decide. It is edited by Dr. L. J. Collins, of Harrisburg, Ark. Price $1.00 per annum.

——"What Shall we do with the Inebriate?" This question is carefully examined and discussed by T. D. Crothers, M.D., of Hartford, Conn., in a reprint from the *Alienist and Neurologist*, for April, 1881. Dr. Crothers, whose extended experience entitles him to speak authoritatively on the subject, is a firm believer in the curability of inebriety. His remarks on the cause and prevention of inebriety we recom-

mend to the careful perusal of all active workers in the cause of temperance.

——"The Saratoga Mineral Waters," with directions for their use, is the subject of a neat little pamphlet of fifty-seven pages, by Dr. W. O. Stillman, of Saratoga. The substance of this treatise was published in the REPORTER, May 22d and 29th, 1880. The book contains a map of Saratoga Springs and Excelsior Park, and numerous illustrations. A full analysis of the different springs and directions as to their use are given. A very complete index of the diseases which are benefited at Saratoga will enable the reader to refer to any of them without loss of time. Visitors to the Springs will find this guide of great value.

BOOK NOTICES.

A Text-Book of Practical Histology, with Outline Plates, by William Stirling, M.D., Sc.D., F.R.S.E., Regius Professor of the Institutes of Medicine in the University of Aberdeen. With 30 Outline Plates, one Colored Plate, and 27 Wood Engravings. Philadelphia: J. B. Lippincott & Co. London: Smith, Elder & Co. 1881. Cloth. 4to, pp. 186. Price $4.50.

The numerous treatises on the microscope and microscopical anatomy which have been published recently evince a marked increase in the interest taken in this important branch of medical study and in the requirement of the physician of to-day compared with a dozen years ago. The introductory chapter, comprising fifty-six pages, treats of microscopical technology, and should be carefully studied before practical work is attempted. The remaining hundred and thirty pages are devoted to practical work, simple rules for the preparation and examination of the various histological elements of the body, both in their fresh state and as permanent preparations, being given, the methods described being such as the author, after nine years' experience in the teaching of practical histology, has found to be really reliable. The outline plates are intended to aid the student in making a drawing of the majority of microscopic specimens which he makes, for preservation. This constitutes the chief characteristic feature which distinguishes this work from others of the same class. The text is printed in large, clear type, on good paper, the engravings are well executed, and the whole is encased in strong and durable binding.

Third Annual Report of the State Board of Health of the State of Rhode Island, for the year ending December 31, 1880. Providence: E. L. Freeman & Co., Printers to the State. 1881. pp. 290.

The vast amount of valuable information collected by the Board, and the way in which this information has been tabulated, showing the relative frequency of deaths, births, and marriages, to the population and to each other, throughout the State, for a period of years, cannot but reflect great honor on the officers who have discharged their duty with such praiseworthy zeal. The great difference both in the birth rate and death rate in different towns, is most remarkable; thus, during the period of ten years, from 1870 to 1879 inclusive, Jamestown shows both the smallest birth rate and death rate, the average of the former being 10.2 per 1000, and of the latter 8.6 per 1000, while during the same period Bristol exhibits the largest birth rate, viz. 29.8 per 1000, and Providence the largest death rate, 20 per 1000. The report contains meteorological tables, giving the maximum and minimum, as well as mean temperature, rain fall and prevailing winds. It also contains valuable papers on heredity, by Miss A. E. Tyng, M.D., and on house drainage, by the Secretary of the Board.

The First Baby: His Trials and the Trials of His Parents. By Jerome Walker, M.D., Physician to the "Seaside Home for Children," Coney Island; Lecturer on "Diseases of Children" at "Long Island Hospital Medical College." New York: Brown & Derby, 21 Park Place. 1881. Cloth. 12mo, pp. 203.

In the introductory chapter the author informs us that part of the information contained in this book has already been anonymously given to the public, in a little volume entitled, "How We Raised Our Baby." In the present volume the trials of "the first baby" and of its parents, up to the age of three years, are vividly depicted in the form of a narrative. Especially has the author succeeded in giving a true and faithful reproduction of the meddlesomeness of mothers-in law, nurses, and kind but obtrusive neighbors. If this little book could only cause such persons to see the evil effects of their well-meant officiousness, the author would have earned the gratitude of all young mothers and babies. It should, however, not be read by unmarried men, for it would deprive all but orphan girls of the chance of getting husbands, and young men, as soon as married, would be wanting to settle down in the middle of some desolate desert, with no other human habitation within a hundred miles. It contains much wholesome advice, and we recommend it to ladies of every station in life, whether young or old.

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D. G. BRINTON, M.D., EDITOR.

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REFORM AMONG DRUGGISTS AND DOCTORS.

The "Medico-Legal Society of Philadelphia" has published and distributed a small pamphlet containing a list of druggists and a second list of physicians. The object is to bring about certain reforms in the relations of these two classes, and to let all whom it may concern know who are reformers, and, by implication, who are not.

On the one hand the pharmacists agree "to protect the public welfare, the province of the regular physician, and the interests of regular pharmacy and legitimate pharmaceutical manufacturing, by placing out of sight all patent and trade-mark medicine signs and medicines, by refraining from distributing all patent medicine almanacs, circulars, etc., and by discouraging the sale of all patent and trade-mark or quack medicines; and who also agree that neither themselves nor their employees will renew any physician's prescription marked *Do not renew*, or its equivalent; and who also agree to respect the injunctions of the pharmaceutical Code of Ethics, to refer patients asking advice, whenever practicable, to a physician."

On the other hand, the physicians agree "to promote regular pharmacy and the manufacture of regular pharmaceuticals, by withholding their professional patronage and encouragement from the monopoly of patent and trade-mark medicines, and ready-made panaceary in general, introduced to supplant the professional province of the physician and the pharmaceutical province of the apothecary or compounder of medicines; and who also agree to throw the weight of their patronage and influence in favor of those pharmacists who earnestly coöperate with the regular medical profession, in correcting the evils of patent medicine abuses, and certain other irregularities that encroach on the province of the medical practitioner, viz: the renewing of physicians' prescriptions contrary to the wishes or purpose of the prescriber; and the practice of substituting the physician by prescribing over the counter in cases of disease."

The druggists do not seem as anxious as the physicians to carry out this reform, as there are only thirty-four names of the former, against one hundred and thirty-four of the latter class.

Among the druggists we miss the names of most of the leading and fashionable pharmacies; and among the physicians, we should say a majority of the most eminent of our practitioners and surgeons are not represented by their names. It would appear that on both sides there is considerable hesitancy about entering into such an agreement.

There must, of course, be good reasons for men strongly interested in the welfare of their respective branches to hesitate in uniting with a reform, if they really believe it to be such; or else, they must doubt whether such a reform is, after all, just as much and what it sets forth to be.

One point will readily suggest itself: it is at least open to doubt, whether physicians ought to band together to "throw the weight of their patronage and influence" either for or against one or another class of druggists. Patients or their families and friends, in this city, usually

give their custom to some particular drug store; and a physician has no business to step out of his way to try to get them to go elsewhere. It is none of his affairs where the family buy their drugs.

Another point is also evident; the druggist agrees to discourage the sale of *all* patent and trade-mark medicines. Now we seriously doubt whether almost any one of our leading physicians strictly does this himself. There are certain medicinal preparations put upon the market, in forms so convenient, palatable, or of defined and constant activity, under trade marks, that we find they are used more or less by every physician of whom we have asked the question. They are not secret nostrums, but manufactured products. In the list of physicians' names given we see at least two who, to our personal knowledge, prescribe a certain trade-mark pharmaceutical frequently.

In regard to patent and trade medicines, there seems a slight inconsistency in the position of the Association. We, as a profession, have hitherto opposed patent medicines, because they do harm *to the public*; but here we are told that the reason we should oppose them is that "they encroach on the province of the regular practitioner." Is not this letting down a little? If the patent medicine trade is what we have all along pretended it is, then it rather helps us by making people sick; but if these nostrums, on the whole, do away with the need of doctors, had we not better keep this important fact to ourselves, as otherwise our lofty and virtuous rage about their sale will scarcely be so much admired as it has been?

Has not the Association been rather too zealous in this excellent work? Remember that Talleyrand found nothing so dangerous in public matters as too much zeal, even in a good cause.

THE VICTIMS OF THE TOY PISTOL.

The celebration of the Fourth of July this year was attended with a series of unusually grave accidents. Our people, with all their opposition to the Chinese, resemble them in one of their most stupid traits—they seem to think that the proper way to testify joy on a National holiday is to make a series of hideous noises, to fire "squibs," and toy guns, and "crackers," and other such abominations and diversions of unintelligent savages. On the fifth, all the newspapers have long lists of the dead, wounded, and missing.

In spite of the gloom which, on the fourth recently past, overshadowed the country, on account of the critical state of the President, who was trembling between life and death from the effect of an assassin's bullet, this foolish and inept pastime was not omitted. There were the usual number of eyes lost, fingers blown off, innocent passers-by shot, etc. But what was remarkable, was the extraordinary number of cases of tetanus, which, in many instances, led to the death of those but slightly wounded. Thus, already we have noted one death in Reading, one in Womelsdorf, Pa., one in Washington, eight in Rochester, New York, and eighteen in Baltimore, and no doubt very many more which have escaped our observation.

One peculiarity, so far as we know, is common to all these cases, and that is, that the wounds were all produced by the common *toy pistol*, which is shot with prepared cartridges in thin copper shells.

A physician of Baltimore asks the question, "What ingredients are used in making the cartridges of these toy-pistols? Have any such ingredients been known, heretofore, to have a tendency to cause lockjaw?"

It is extremely proper that these questions should be investigated by official authority, and the results made known. No such dangerous and destructive toy should be allowed to be sold.

A correspondent in Reading, in this State, describes a fatal case that occurred in his practice. A lad of fourteen years was wounded on the 4th, by a discharge of such a pistol, the cartridge entering the palm of the right hand, at the base of the index finger, making a very small wound, somewhat burned by the explosive material. On the 18th of the month the patient died, from tetanus of the severest character.

Our correspondent justly comments on this case in these words: "The weapon by which the wound of my patient was caused is one the manufacture of which should be prohibited by law; the numerous and fatal character of the injuries produced by it on the last Fourth of July render it a subject worth the consideration both of the medical profession and the legislatures of our country."

All will agree with this, and we urge the examination of the subject on the Boards of Health of those States who have Boards, and on the municipal authorities elsewhere.

The only reason, we should add, that Philadelphia does not figure in the list of cities showing casualties from this cause is that at present we have a Mayor who enforces the law preventing the sale or explosion of any kind of fireworks in the city on that day. To this wise and judicious action the parents of twenty or thirty boys no doubt owe the fact that their sons are not now in their graves, from the results of this pernicious toy. If anything can lead the American people to seek some more sensible and civilized method of celebrating their national anniversary, it may be that these frightful accidents will be the means.

Notes and Comments.

The Treatment of Summer Dysentery of Children.

On this subject, Dr. W. W. S. Watson, of New Holland, Ill., says, in the *Michigan Medical News*, July 11th, 1881, that the first indication is to thoroughly rid the alimentary canal of irritating ingesta. This is most promptly effected by means of a saline purge, which, in addition to its action in this direction, also depletes the inflamed tissue through the exosmosis of serum which it causes. Castor oil is preferred by some; it is blander in its action, but adds nothing to its purgative action. After this thorough cleansing of the canal the indication is to check the discharge. For this purpose he relies on opium and acids, after the following formula, modified, of course, according to age and other circumstances:—

℞.	Syr. rhei,	℥ iss	
	Spt. ammoniæ arom.,	℥ ss	
	Spt. camphoræ,	℥ ss	
	Tr. opii,	℥ j.	M.

Sig.—A teaspoonful every three hours to a child eight years of age.

When there is much nausea a powder composed as follows may be given every alternate hour and a half:—

℞.	Bismuthi subnit.,	℈ ij	
	Pulv. ipecac.,	℈ ss.	M.

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Camphor has a very marked controlling influence over this affection, and its combination with opium will be found invaluable.

When the discharge is largely composed of white mucus, destitute of a trace of bile, the administration of small doses of calomel restores the deficient element, and with this restoration improvement in the condition of the patient follows.

The Fluorides in Medicine.

Dr. J. M. Da Costa gives, in the *Archives of Medicine* for June, 1881, the results of his observations on the effects of fluorides. The sodium salt was found to produce, even in three grain doses, such excessive nausea and vomiting that its use had to be discontinued. Both the ferric fluoride and the ferrous fluoride were at different times employed; the latter proved the more pleasant, and was more thoroughly tested.

With reference to the potassium fluoride, these results were obtained: It was first given to a case of subacute rheumatism, with considerable pain, in doses of five grains every third hour. It produced a most decided effect on the pain, without causing drowsiness or showing any influence on temperature. The urine was increased, and the specific gravity lowered; but this may have been owing to the greater amount of water taken, in consequence of the thirst. At the end of the second day there was nausea, with loss of appetite, and the medicine was discontinued. The pains returned, and at the patient's own request, a few days subsequently, the fluoride was resumed, in five-grain doses every third hour, and continued for three days, with the same good influence on the pains, but with, finally, the nausea and epigastric distress, which compelled its discontinuance. No hypnotic properties were observed from its employment.

In a second case of rheumatism, more acute than the first, five grains were given every third hour. The pains were greatly lessened, but the gastric uneasiness was caused as in the first case, and also occasional burning pain, and, once, vomiting. On the third day the bowels became loose, and the medicine was abandoned. But the patient missed the relief from pain, and asked that the salt be resumed. It was done; yet, as after a few days some gastric distress was

noticed and a loss of appetite, it was finally stopped. During its administration the flow of urine was greatly increased, the patient drinking, however, considerable water. Before the salt was given, three pints of urine were passed daily; on the second day, six pints, on the third day. five pints; the specific gravity was lowered. The doctor thinks that they are not well enough tolerated by the stomach to be really useful additions to practical medicine.

On the Treatment of Otorrhœa.

Dr. Thaulow says, in *Norsk Magazin for Lægevidenskaben*, that he regards syringing the ear, in otorrhœa, as not only unnecessary, but even injurious. The treatment which he has found of greatest value consists in first removing as much of the secretion as possible with dry cotton, after which the passage is plugged with cotton previously soaked in a saturated solution of boracic acid, and then dried. This should be removed and a new tampon reinserted once, or at most twice, daily. Under this treatment the secretions rapidly diminish and the odor disappears. The accumulations in the middle ear must, of course, at the same time be removed by Politzer's method, or inflation through the Eustachian catheter.

A Case of Severe Injury of the Brain, with Recovery.

Dr. William Wood, of East Windsor Hill, Connecticut, states, in the *American Journal of the Medical Sciences* for July, 1881, that on May 29th, 1880, he was summoned early in the morning to act as a juror in a coroner's inquest, on a man run over by the cars. On arriving at the depot where the body was brought, he found a well dressed gentleman lying on the platform with his head cut open from the inner canthus of the left eye to the occiput. The brain was exposed, and a furrow some three inches in length was cut through the anterior portion of it. The left eye was turned up so that the pupil was not visible. On the opposite side of the head was a scalp wound three and one-half inches in length. The conductor of the train stated that the man was lying *beside* the track, and that his head was struck by the pilot of the engine.

On looking at the cut in the brain, slight pulsation was detected, and there were also some irregular efforts at respiration. Dr. Wood immediately removed some spiculæ and depressed fragments of bone. The head was dressed with cold applications, after being approximated by sutures and bandage. The patient was comatose at first; he regained partial consciousness on the fourth day, and was rational on the fifth. The wound healed without accident, and the patient returned to his work on the twenty-sixth day after the accident, and his health has remained good since; no trouble about his head; mind perfectly clear. He sees objects out of his injured eye, above or on a level with his eye, perfectly well, but has not the power to look down while holding his head erect. To test his vision, the Doctor blindfolded his uninjured eye, and gave him a letter, which he read accurately and without hesitation.

Glaucoma Caused by Mental Worry.

Dr. Leartus Conner, editor of the Detroit *Lancet*, reports, in the July number of that journal, a case of glaucoma of the left eye of a gentleman, who, five days previous to the occurrence of any trouble in his own eye, had brought to the city for treatment his son, who was suffering from an injury to his left eye, caused by the explosion of a gun cap. The gentleman was very much alarmed about the boy, and the Doctor thinks that his extreme anxiety was the cause of the glaucomatous attack. He also draws attention to the singular fact that it was the left eye of both father and son that was affected, asking whether this should be regarded as a mere coincidence, or if it might not be due to the constant thought of the father concerning the injured left eye of his boy.

Iodine as a Specific in Croupous Pneumonia.

Iodine or iodide of potassium is, according to Dr. Schwarz, in *Deutsche Med. Woch.*, Band vii, No. 2, 1881, a specific in simple, uncomplicated croupous pneumonia. If given during the first twenty-four to thirty-six hours from the onset of the initial rigor, it will arrest the further progress of the disease. In illustration of this view, ten cases are recorded in which the crisis occurred before the end of the second stage, and in one case at the end of the first day. The following are the formulæ adopted by Schwarz:—

℞.	Tincture of iodine,	5 drops
	Water,	120 grams (℥ iv)

Sig.—One tablespoonful hourly.

℞.	Iodide of potassium,	1½ grams (22 grs.)
	Simple syrup,	30 grams (℥ j.)
	Water,	120 grams (℥ iv).

Sig.—One tablespoonful hourly.

Special Reports.

NO. XIV.—TOXICOLOGY.

There is little doubt but that in many instances symptoms due to poisons of various kinds, some taken in the food or water, others inhaled in the atmosphere, some administered designedly, others strictly accidental, are misinterpreted and overlooked by the physician, because his attention is not awakened to the possibility of their frequent occurrence. It is important that he should bear in mind how directly toxic are many of the common articles with which we are in daily contact.

Poisoning from Tobacco.

The subject of poisoning by tobacco was discussed some months since, at the Medical Society of Prague (*Allg. Med. Cent. Zeit.* No. 33, 1880). Dr. Bulowa stated that he was physician to a factory employing five hundred girls in cigar making. Severe cases of anæmia were not rare. They were accompanied with great muscular weakness of the lower extremities. Such muscular asthenia was also at times present, when no anæmia was noted. Cramps of the muscles of the forearm were also common, at times extending to the trunkal muscles. These were generally seen in young subjects. From autopsies quoted, it appears that chronic tobacco poisoning produces marked anæmia of the brain and spinal cord.

Poisoning from Wall Papers.

Last winter Dr. John H. Clarke, in the *Medical Times and Gazette*, urged upon practitioners greater attention to the symptoms of poisoning from wall papers. He writes:—

A large number of cases of suffering from this cause have come under my notice of late, and I was at a loss to understand them until I tested the wall papers, and found in them quantities of arsenic, and was unable to make any impression for good on the patients until the wall-papers were removed.

Smarting in the eyes, though a fairly constant symptom, was not always present, and when present was not always a leading symptom. Deep general debility, a continued feverish state, chronic coryza, hæmoptysis, sickness and retching, cramps, spasms, diarrhœa or constipation, I have observed in various cases.

It should be remembered that it is not the green papers alone that contain the poison. It is largely used in the manufacture of other colors. I have found it in yellow, pink, blue and drab, and no doubt it is to be found in many more.

About the same time Dr. Kelsey related to the New York Clinical Society (New York *Medical Journal*) some facts regarding arsenical poisoning from wall paper as it had recently occurred in his own person. For the last two years he had suffered from occasional attacks of gastric and intestinal disturbance, attended with slight fever; and from a growing sense of lassitude and inability to do hard work, either mental or physical. The walls of his office were papered with a very rich green "velvet library paper." During a recent house-cleaning the paper was thoroughly swept down, and, as a result, a green powder was observed on the floor all around the edge of the room. On testing this, he found it to be almost pure Paris green. A paper hanger was sent for to remove the paper, and after working a few hours he was seized with all the symptoms of acute arsenical poisoning, and was obliged to desist. Another who took his place to finish the job suffered in the same way on the following day. It was discovered that at some former time the ceiling had been covered with Paris green, and that subsequently a coat of another color had been laid on over it, and the servant who attempted to wash this was confined to his bed for three days with cramps and diarrhœa. Finally, two members of Dr. Kelsey's household, who had taken considerable interest in what was being done, were attacked with similar symptoms; and he himself had one of his old familiar attacks. Since repapering, now six months ago, he had had none of his old trouble.

Dr. William J. Hills, in the Boston *Medical and Surgical Journal*, January 13th, discussing the tests for arsenic in wall paper, gives his own method, which is as follows:—

Take a sample three or four inches square (less will suffice with plain papers), cut into small pieces, moisten with concentrated sulphuric acid, and heat carefully till the paper is thoroughly charred. Let the charred mass cool, add to it about one fluid ounce of water, grind the black mass fine, that the water may come into contact with all parts of it, filter, and wash. The arsenic will be found in the filtrate, which is examined by Marsh's test. All the chemicals must be free from arsenic. A paper which, treated carefully in this manner, furnishes no arsenical mirror on porcelain, does not contain any appreciable amount of arsenic.

Another form of poisoning from wall paper has been discovered. Prof. Bernbech calls attention to the probable danger arising from the use of ultramarine wall papers. He states that a room hung with an ultramarine colored paper gave out a most disagreeable smell of sulphuretted hydrogen, the source of which for some time escaped detection. Eventually, however, a close examination was made of the paper,

which led to the conclusion that the deep blue wall-paper was slowly undergoing a process of decomposition under the influence of the alum in the paste used in hanging. This appeared to be confirmed, for on steeping a piece of the paper in a very dilute solution of alum it gave off sufficient sulphuretted hydrogen to be quite perceptible to the nose and to blacken lead paper.

Schmidt's Jahrbücher, No. 1, 1881, contains a number of cases of arsenical poisoning from carpets and upholstering materials colored with arsenical dyes. A Committee of the Swedish College of physicians has reported that sufficient attention is not given to deteriorations of health from this source. It is impossible to aver that even an exceedingly minute quantity of arsenic in dye stuffs is harmless. On the contrary, it is more likely to be harmful. Traces of arsenic can be found in the urine of persons who sleep in rooms carpeted or papered with materials containing this substance. Obstinate dyspepsia, inflammatory affections of the eyes, general debility and languor, may often be traced to this form of poisoning.

Poisonous Crayons.

The colored crayon pencils now so much used by children are colored by poisonous dyes, and those who use them should be taught not to put them in the mouth. The following instructive case is given by Dr. CAMERON, in the Dublin *Journal of Medical Sciences*, July, 1881:—

A child was taken with severe vomiting, and appeared to be suffering acutely. On closely examining the vomited matter, very small particles of a green substance, brighter than biliary matter, were observed in it. On touching them with solution of ammonia they acquired a deep blue color, showing the presence of copper, and therefore, probably, of arsenic. Precipitated ferric hydroxylate ($Fe_2(HO)_6$) was promptly prepared and administered to the child, as were also ipecacuanha, a little mustard, and abundance of warm water. The washing out of the child's stomach was continued until the disappearance of the green particles from the vomit, which, however, did not take place for more than two hours. In order to dislodge the poison from the bowels a purgative was administered. The egesta was found to contain numerous bright green fragments, and they did not disappear until the end of the second day. The child was feverish, restless, and sleepless for about forty hours, after which he became slowly better, but was not convalescent until about the seventh day. His abdomen was tympanitic, his features were shrunken, and the cerebral symptoms were severe. On three occasions the patient nearly died from collapse. He recovered after about a month. It was found, on examination, that he had eaten a portion of a green-colored crayon, which, on testing, was found to be colored with *arsenite of copper*, the amount of arsenious acid being 1.72 per cent.

The exceedingly dangerous character of such a means of amusement for children is very evident.

Poisonous Articles of Food.

The Committee on Epidemic Diseases of the last House of Representatives secured a mass of convincing evidence of dangerous food adulterations in this country. From one of the reports submitted, made by a chemist of Chicago, we make the following extracts:—

At the request of a highly respectable citizen of Chicago, I have examined fourteen brands of sugar, bought, as I understood, in this city, some granulated, some white, some colored, some coarse, and some fine. I tested them thoroughly for impurities. In twelve of the samples I found tin in the form of a chloride, an active poison. I have examined several syrups, made essentially and entirely of glucose, and found in them chlorides of tin, calcium, iron, and magnesia, and in quantities which made them very poisonous. In one case a whole neighborhood was poisoned and I was told of one death. I have in several cases found sugar of lead in vinegar.

I have had large experience in the analysis of colored poisonous articles of clothing, being employed by one of the largest dry goods firms in this city. I examined, I think, sixteen samples, and nearly all of them were poisonous. I have also analyzed for other parties. In one case a child nearly died from wearing colored stockings.

I have examined a large number of specimens of oleomargarine, and have found in them organic substance in the form of muscular and connective tissues, various fungi and living organisms which have resisted the action of boiling acetic acid; also eggs resembling those of the tapeworm. I have them preserved to be shown to any one who desires to see them. The French patent under which oleomargarine is made requires the use of the stomach of pigs or sheep. This is, probably, the way the eggs get in. I have specimens of lean meat taken from oleomargarine. There can be no question that immense amounts of oleomargarine are sold and used as pure butter. I regard it as a dangerous article, and would on no account permit its use in my family.

Much credit is due to the *Sanitary Engineer*, published in New York city, for its frequent and energetic exposure of food and drug adulterations.

Mould Poisoning.

Poisoning by mould is one of the dangers attendant on eating partially decayed food. In the *Revue d' Hygiène*, January, 1881, M. MEGNIN adduces many cases, among men and animals, of poisoning by mouldy or rancid provisions, notably those of two pigs, who, after eating a quantity of spoiled bread, died with colic, cerebral symptoms, and blindness; and comes to the conclusion that the most virulent and characteristic

of these mould poisons is the *Ascophora nigricans*—the *Oïdium aurantiacum*, polymorphic with *Erysiphe aur.*, ranking next, the *Mucor mucedo* and *Aspergillus glaucus*, which develops into *Eurotium herbariorum*, being comparatively innocent. Other observers have, however, found that the injection of the spores of the *Penicillium glaucum* into the jugular veins of dogs produced an affection of the skin resembling, if not identical with, psoriasis. And M. Colin, of Alfort, found that the inoculation of the hands of vine-dressers, by means of abrasions, with the *Oïdium Tuckeri* of the vine, led to a vesicular eruption, followed by phlegmonous inflammation, gangrene, and, lastly, a crop of *Oïdium albicans* on the mucous surface of the mouth.

Symptoms of Quinine Poisoning.

That deafness, sometimes permanent, is an occasional result of taking large doses of quinine is well known. A case of amaurosis due to the same cause was reported to the Society of German Physicians, by Dr. Gruening (New York *Medical Journal*, February, 1881):—

The patient was six weeks pregnant, and five days after an ineffectual attempt at artificial abortion a fetid discharge set in, with high temperature. Dr. Adler was called in consultation, and removed the contents of the womb, with but slight hemorrhage at the time. The temperature rose to 106° Fah., and was combated by local treatment and quinia internally, to the extent of eighty grains in thirty hours. After a severe hysterical attack, with almost unclouded sensorium, the patient lost her sight and hearing. Twenty-four hours later she could hear again, but remained totally blind. An examination of the eyes showed the pupils dilated *ad maximum*, without reaction to light; the media clear; the optic disk pale; the capillaries distinct, but reduced in calibre; the retina of a hazy appearance, the macula highly colored and prominent. Three weeks later the patient regained her sight, to lose it again upon the appearance of the menstrual flow. This phenomenon took place once more, followed by decided and steady improvement under the administration of nitrite of amyl, digitalis, iron, and strychnia, and the use of the galvanic current. Dr. Gruening reported that there were five cases on record, in every case recovery having taken place with a contracted field of vision. The prognosis, was, therefore, not unfavorable.

Poisonous Effects of Iodide of Potash.

An instance where moderate doses of potassic iodide led to marked purpura hemorrhagica is reported in the Dublin *Journal of Medical Science*, April, by Dr. Duffey. As this medicine is given so largely, it is of unusual interest:—

A patient, 25 years of age, was admitted, suffering with rheumatic pains in the feet. The ankles and knees were red and swollen, and there was mitral regurgitant murmur. He was given potassium iodide, ten grains thrice daily; later it was increased to fifteen grains. After having taken two and a quarter ounces of the iodide, he complained of slight sensation of warmth and itching on both shins, and small round spots on the legs appeared. Next day he felt very well; no fever, no heat, no itching. Over the lower anterior and lateral aspects of both legs, and on the dorsum of both feet, a copious eruption of discrete purpuric spots appeared; they were circular, dark blood red, size of pin's head to that of a lentil, not elevated, and were confined to the legs. There was no languor nor depression, and no albumen in the urine. The iodide was discontinued, and in eleven days no trace of the eruption remained. A week later, no medicine having been given in the meantime, as a test, fifteen grains of iodide of potassium was ordered to be given three times a day. After having taken forty five grains, the purpura again appeared on both legs, without heat or itching. The medicine having again been discontinued, the eruption disappeared in four days.

No doubt can remain but that the iodide of potassium was the cause of the purpura. Iodide of ammonium had the same effect, but iodide of sodium had not.

Poisoning by Carbolic Acid.

Considering the extensive use of this agent, cases of poisoning from it are comparatively rare. There have been in all, probably, about thirty cases reported. Of these at least five-sixths were accidental. Half of all the cases have arisen through an attendant having supplied the acid instead of some other drug, and one fifth have occurred by the person mistaking it for beer or spirits. A certain amount of carelessness must, therefore, be credited with having supplied the great majority of the cases. Only one sixth of the whole have been the result of deliberate suicidal intent, and no case of murder has occurred in which this drug was the poisonous agent. In each case which has been reported a certain amount of treatment was tried, varying from the simple exhibition of oil to the repeated washing of the stomach with the pump. Notwithstanding all efforts to save the life, death resulted in at least nine cases out of ten, in periods varying from a few minutes to two days. One case of suicidal poisoning was reported by Dr. Davidson, in 1875, which is very interesting, as recovery took place after four ounces of crude carbolic acid had been swallowed; but in this case the stomach was well filled, and much of the acid was immediately rejected by vomiting.

One is reported in the Glasgow *Medical Journal*, June 18, 1881, of a young woman who swallowed two ounces of Calvert's No. 1 carbolic acid

solution, with suicidal intent. Medical assistance was promptly at hand, but she died in about three hours. Most of the time she was unconscious, and the suffering did not seem to be severe. She could not swallow, so little treatment could be resorted to.

A partial post-mortem was made. The stomach contained about four ounces of grumous-looking fluid, which smelt very strongly of carbolic acid. Its mucous membrane was detached, in places, in pieces as large as a half crown, was intensely congested and of a greenish-red hue. It could be peeled off the walls quite easily. The duodenum was also in a condition of intense inflammation. The remainder of the intestinal canal was normal.

A series of experiments on dogs with this acid was reported by Dr. TANSINI, in the *Gazet. Med. Lombard.* From twenty cases he draws the conclusions, that even large doses of the dilute acid are not always fatal; death proceeds from paralysis of the respiratory centres, not of the heart; poisoning may arise from absorption, enemata, etc. As antidotes, the sulphur acids may be used, ether injected subcutaneously, and artificial respiration kept up.

Poisoning by Bitter Almonds.

In his classical work on *Poisons*, Dr. TAYLOR mentions only two cases of poisoning by bitter almonds, neither of which was fatal. A third case, where death was prevented only by active medical aid, is recorded in the *British Medical Journal*, July 2d, 1881. The patient, a working man of middle age, ate two handfuls of bitter almonds, and drank a pint of beer. About two hours afterward he suddenly dropped down, unconscious.

When brought to the hospital, at 9.30 P.M., he was quite insensible and collapsed; breathing gasping and labored; he was cyanotic; and the pulse was hardly perceptible, rapid and flickering. There was some dark mucus about his mouth, his jaw was fixed, his teeth firmly closed, and the pupils contracted, and perfectly insensible to touch or light. The extremities were cold. The heart's apex beat was weak and rapid; the abdomen was somewhat distended, and he had passed his fæces unconsciously; some mucous *râles* were heard over both chests. The stomach-pump was at once used, and about a pint of thick brown fluid, containing a quantity of small white particles, smelling strongly of hydrocyanic acid, was removed. His stomach was then washed out with warm water. After this the patient became more collapsed, and his radial pulse almost ceased. The battery was used for ten minutes—one pole over the apex of the heart, the other on his neck, over the course of the pneumogastric nerve. Respiration now improved a little, and the patient was put to bed, with hot fomentations on his chest and abdomen, and hot water to his feet. At 10 P.M. liquor ammoniæ fortior was given as an inhalation, every ten minutes, and the current from twenty-five cells of Leclanche's battery applied as before—contact being made and broken with the inspirations. Under this treatment his breathing became deeper and more regular; the pulse was 120 to 140. At midnight the patient remained in about the same state. The battery, and inhalations of liquor ammoniæ, were continued alternately, every half-hour, until 2 A.M. The pulse was 130, and stronger. At 2 A.M. turpentine stupes were applied over the chest, and an injection of one twenty-fourth of a grain of sulphate of atropia was given hypodermically; after this he slowly recovered.

The symptoms were, no doubt, due to prussic acid, which was found in the matter withdrawn by the stomach-pump. The acid is produced by the mutual action of two of the constituents of the almond, emulsine and amygdaline, in the presence of water at a certain temperature. A point of medico-legal interest is, that there was a considerable interval of consciousness between the ingestion of the almonds and the first development of the symptoms, which was, as seems to be the rule with prussic acid poisoning, quite sudden.

Poisonous Petroleum Products.

Such an enormous use is made of petroleum products nowadays that the profession should be aware that they are not wholly innocuous. The following instance of poisoning by *paraffin* is given in the *Lancet*, November 12th, by Mr. HORACE ELLIOTT, F.R.C.S.:—

A short time back a child two years of age drank some paraffin from a tin can. The child was seen about twenty minutes afterwards, and was found to be in a state of semi-collapse, being very pale; the surface of the body was cold and clammy; the pulse small and feeble; the pupils were widely dilated, but acted slightly to the light from a candle. The breath smelt strongly of paraffin. The little patient was dazed and very drowsy, and could only be kept awake with difficulty. Did not cry. Vomited slightly before the doctor saw it, and again soon afterwards. Emetics were administered, which only acted slightly, the vomited matter smelling very strongly of paraffin. The child was not allowed to go to sleep, and about two hours afterward it began to rally; the surface of the body becoming warmer and the pulse more frequent; the patient cried; there was no diarrhœa. Next morning the child was quite well.

Lead Poisoning.

In the *Centralblatt für Nervenheilkunde*, No. 8, 1880, Dr. A. KAST positively denies the statements made by Dr. MASON, of this country, that frogs placed in a solution of acetate of lead, after a few days become paraplegic. This does

not occur even in solutions of chloride of lead. Symptoms of infiltration and swelling occur, but no signs of anything abnormal in the nervous system was noted.

The pathology of lead paralysis is studied by Dr. E. ZUNKER, in the *Zeit. f. Klin. Med.* p. 496, 1880. He does not believe that the alteration in the gray substance of the spinal column is the primary cause of the paralysis, but that this is rather to be attributed to myositis and neuritis brought about by the peripheral affection. This begins before the nervous centres are attacked, or, at any rate, at the same time, and it is not possible, clinically, to insist on the primary, peripheral and central stadia of the disease, as some authors do. Dr. ZUNKER's positions are supported by the result of the autopsy of a painter, thirty-six years old, the subject of lead paralysis, who died of phthisis, and who showed marked neuritis, but no central changes

Physostigma vs. Belladonna.

The antidotal action of Calabar bean in belladonna poisoning is illustrated by a case in the *British Medical Journal*, June 11th, reported by Dr. JAMES HUDSON. The patient took a large overdose of a solution of atropia. Feeling strange symptoms he sent for Dr. HUDSON, who on his arrival injected a solution of the extract of physostigma. At that time there was not the least trace of returning consciousness. In less than five minutes after the injection the patient looked round in a surprised manner; and in five minutes more he was in complete possession of his faculties, and gave a clear, detailed account of the occurrence; and it was with great difficulty that he could be persuaded into the belief, that some seven and a half hours had elapsed since he had sent for the physician.

This case is interesting from the marked promptness of action of the physostigma; and, though there is no evidence that the patient had taken a fatal dose of atropia, still he had taken sufficient to produce severe symptoms, which symptoms were immediately relieved by the Calabar bean.

The Effects of Bromide of Potassium in Strychnia Poisoning.

Mr. ENGLEDUE PRIDEAUX gives, in the *Lancet*, January, 1881, the history of a case of strychnia poisoning, in which an ounce and a half of bromide of potassium was administered in the space of a few hours, as an antidote to three-quarters of a grain of strychnia. The spasms soon ceased after the first two doses of half an ounce each, and next day the woman was quite unable to raise herself, and hardly able to move a muscle; indeed, she seemed like a sheet of wet blotting-paper, and was almost completely paralyzed; her urine had run away in great excess, and a large quantity of liquid fæces. Her pulse was slow and remarkably feeble. After three days she was able to raise herself, and had regained the power over the sphincters; and on the fifth day was able to sit up.

CORRESPONDENCE.

Tailed Humanity.

ED. MED. AND SURG. REPORTER.

Apropos of your editorial on Anthropological Studies, in the issue of the REPORTER for July 16th, I have a *little tale* to relate to you, of a military character now stationed somewhere in the far West. My friend, Captain S. H. Norton, of this city, late of Company G, Second U. S. Cavalry, was a classmate of his at West Point, in the year 1861, just before the outbreak of the late unpleasantness, and graduated with him several years later. They were mutual friends, great cronies together, and the captain can, therefore, substantiate all the facts herein given. The young man was then eighteen years of age, short, stout of stature, a cousin to a sculptor since become somewhat famous, both natives of New York.

This young man suffered from an elongation of the coccyx, forming a protuberance which bulged the skin considerably, plainly visible and movable. The exercise of horseback riding, compulsory in the riding school of the Academy, always gave him the greatest pain and distress. Frequently, while undergoing these exercises—agonies almost unendurable to him—the cantle of the saddle so chafed upon this protuberance as to force it through the skin, the blood trickling down into his boots. Aside from this elongation, however, there was nothing to denote a caudal appendage, either modern or primitive.

Dropping down upon some undoubted instances, however, where this was the case, we find Greve's, 1878, *Virchow's Archives*, said to be the longest tail on record afflicting humanity. This occurred in an infant, newly born, seven to five centimetres in length, and which, when pricked with a pin or needle, actually moved itself. It was removed by an operation, and when dissected by Virchow, it was found to contain bone, cartilage and muscle, and, although not a tail proper, minus the hair, was, nevertheless a good substitute for one. Unfortunately, our record of such abnormalities is exceedingly scarce, as scarce as the tails themselves, in fact; yet, that they occasionally do occur, even in generations so remote as this from the primitive condition of *caudals*, there is every reason to believe. Recently, Dr. Ornstein, of Athens, the surgeon-in chief of the Greek army, reported several cases where there was an unusual growth of hair in the sacral region, but in which there was no elongation of the coccyx. In one of his,

however, a decided prolongation of the coccyx had taken place in connection with a hairy sacrum, the appendage measuring two inches in length.

My old professor of anatomy in the University of Pennsylvania, Dr. Leidy, when he came to this interesting region of the early development of man, always insisted upon the tail, taking up considerable time in endeavoring to establish an evolution. CHAS. H. MILLER, M.D.

Peabody, Kansas.

[As Prof. Virchow was President of the Anthropological Society, and in the chair when the report in question was read, evidently he did not disagree with its findings, or he would have spoken up.—ED. REPORTER.]

Questions in Et' ics.

ED. MED. AND SURG. REPORTER:—

I wish to offer some reflections on the "Questions in Ethics," as they appear from time to time in your column devoted to "Queries and Replies." The questions are generally so stated as to make the reply obvious to any one at all acquainted with the Code. Doubtless every intelligent reader is ready to approve the reply, *because* it is obvious, and the physician pronounced guilty of a breach of the Code will approve "the finding of the court." But the reply is based on the statement of *one* of the parties, and therefore, decides nothing, as *between* the parties.

I am led to offer these reflections by a question in Ethics in the first number of the current volume of the REPORTER, signed J. L. M. The answer to that question, as stated, is as obvious to the writer (personated by D. B.), as to you, Mr. Editor, or to the thousands of readers of your journal. But in that case the statements are *mis* statements of the facts, as they are known to the writer, and the same is probably true of the majority of such *plain questions*. In the opinion of the writer, questions in Ethics, intended for publication, should be confined to such as involve doubtful interpretation of the law, the answers to which would be instructive to the profession. The law is, in general, so plain in its provisions, that any one wishing a favorable judgment from the laity would only need to state the case and read the law applying to the case, to obtain such favorable judgment. J.

July 21st, 1881.

[J. should remember that an editor is not gifted with omniscience, and can only know the facts as reported to him; nor has an editor any right to impute bad motives to a correspondent asking a plain question; nor should J. think that the provisions of the Code are as clear to all as they may be to him. The opinion of an editor may also legitimately differ from that of the above writer as to what it is desirable to publish. In the case referred to, if there were misstatements of facts, then, of course, the opinion given was probably wrong, and with a full hearing might have been reversed; but it stands to reason that an editor can only speak with the light he has, not with that he has not.—ED. REPORTER.

Sudden Death from Abortion.

ED. MED. AND SURG. REPORTER:—

An autopsy of the body of Miss H., of our city, developed the fact that all of the organs of the body had been in a normal condition. The heart did not even show any signs of organic lesions. The testimony before the Coroner's inquest showed she had been treated for functional disease of the heart. It was quite evident that some mischievous hand had attempted an abortion, as the only sign of any meddlesome interference was an abrasion of the mucous membrane of the posterior part of the neck and body of the uterus, as if made by a sharp instrument. In the neck the membrane was only separated, in the body the muscular fibre was slightly lacerated, but little or no contusion of the parts. *And no signs of hemorrhage.* A fœtus of four to four and one half months was removed. The uterus was soft and flabby, as if one-half to two-thirds of the waters had escaped. The inquest showed that death ensued immediately after the introduction of a rubber catheter with the wire protruding through the lower opening, just enough to injure the parts in the manner described.

Query: There being functional disease of the heart, could this woman have died from the shock; or did she die from the introduction of air into the circulation? If not, what was the cause of death? S. S. TROY, M.D.

Nashua, Iowa.

[The probable cause of death was introduction of air into the veins.—ED. REPORTER].

NEWS AND MISCELLANY.

Places Exempt from Hay Fever.

The official report of the United States Hay Fever Association for 1880 gives the following list of places more or less exempt:—

Adirondack Mountains and Lakes, Alleghany Mountains, Aroostook River, Ashland, Wis. (Lake Superior). Bayfield, Wis. (Lake Superior), Bristol Hills, Ontario County, N. Y., Calumet, (Lake Superior Region), *Canada, Ca'skill Mountains, *Chautauqua Lake, N. Y., Colorado Mountains, Cranberry Summit (Baltimore and Ohio Railroad), Cresson, Pa., *Denver, Duluth, Minn., Eagle river (Lake Superior), Eastern and Northern Maine, Eastport, Maine, Ebensburg, Pa., Esquinonia, Europe, Fairfield Valley, N. C., height 3500; Fire Island, New York, *Florida, Glover, Vt., Green Bay, Wis., Hersey, Mich., Houghton (Lake Superior), Ishpeming (Lake Superior), *Jamestown, N. Y., *Kansas, S. W., *Kane, Pa.. Keene Flats, Essex Co., N. Y., Kingwood (B. and O. Railroad), Labrador, Lake Minnetonka, Minn., (Lake Superior Region,

The * indicates partial or doubtful.

*Louisiana, Mackinaw, *Marquette, Mich. (Lake Superior), *Meadville, Pa., *Minneapolis, Minn., *Minnesota, Minnequa. Pa., *Monadnock Mountain (summit of), near Peterboro' N. H.; Moosehead Lake, Mt. Mansfield, Vt., Mt. Desert, *Mountain Lake, Giles Co., Va., *Muscatine, Iowa, *Nantucket, Mass., New Brunswick and Nova Scotia. New York—Certain towns in counties of Alleghany, Cattaraugus, Chautauqua, Chemung, Cortland, Madison, Steuben, and other places in New York, Pennsylvania, and Ohio, Plateau; Nevada, North Danville, Vt., North of St. Lawrence river, North Mountain, Sullivan County, Pa., Oak Bluffs. Martha's Vineyard, *Oakland, Md., Overlook House, Catskill Mountains, Peterboro', N. Y., Petoskey, Mich., Put-in-Bay, Lake Erie, *Princeton, Mass.. Quebec, Rocky Mountains, Saulte de St. Marie, Mich., Schroon Lake, N. Y., *St. Anthony, Minn.. St. Lawrence Valley, Superior City, *Summit, Pa., *St. Paul, Minn., St. John River, N. B., Tadoussac, Canada, Tulerosa and Wingate, New Mexico, *Wachusett Mountain, Mass., Western Territories, Willoughby Lake, Westmore, Vt., (depot, West Burke, Passumpsic Railroad), West Charleston. Va.

White Mountains—From Lancaster and Littleton on the west, to Bethel, Maine, on the east; from Jackson, and the Crawford House, on the south, to and into Canada on the north. (Average elevation 1400 feet.) This territory embraces: Bethlehem, N.H.; Bethel, Maine; Bowman's Place, between Moon and Israel rivers; Carrol, Twin Mountain House, Crawford House, Crawford Notch, Cherry Mountain, Fabyan's, White Mountain House, Franconia, Notch and Village, Flume, Gorham. Glen, Gilmanton Hill, Jefferson. *Lancaster, *Littleton, Mount Washington, Old Crawford House, Pinkham Notch, Profile House, Randolph, Shelburne, Valleys of Ellis and Sawyer rivers, Whitefield and Willey House.

Hotels and boarding-houses can be found in all of these places, prices of board varying from six to fifteen dollars per week, during the hay fever period.

The * indicates partial or doubtful.

A Warning to Medical Students.

The following item is found in the London *Medical Times and Gazette*, of April last:—

Mr. G. H. Hull, the Surrey Coroner, last week concluded an inquiry, at Battersea, as to the death of a woman, the wife of a potman. The husband of the deceased said he went for a Mr. Scott, at a private dispensary in Battersea, Park Road, the name of Dr. Martin being on a brass plate at the door. Mr. Scott attended and made frequent calls until she died. She had given birth to a child. Medical evidence went to prove that the woman died from exhaustion; her life might have been saved had proper means been taken. William Scott was called and gave evidence. He said he was a medical student, and resided at 547 Battersea, Park Road; the house was his property. He had never represented himself as being qualified, or stated that the dispensary belonged to him. He sent for Dr. Martin when he found that the deceased was becoming exhausted. The jury, after a long deliberation, returned a verdict of manslaughter against William Scott, and he was committed for trial at the Central Criminal Court, bail being taken for his appearance.

Trichinosis in American Hams.

A strong opposition to the use of American hams is becoming manifest in Europe. At the meeting of the German Public Health Association, in Berlin, in June, the Director of the Royal Veterinary School, Prof. Roloff, gave a very unfavorable opinion against them, saying, that from one to four per cent. are found trichinous. The Hungarian Council of Public Health have officially recommended that the importation of American swine flesh of all kinds into the kingdom be forbidden. Of three hundred American hams examined in one house at Hamburg, eight were found trichinous.

Twin Half-Brothers.

Dr. J. G. Earnest, of Newman, Ga., reports the following unique case in the *College and Clinical Record*, July 15, 1881:—

Amelia, a coal black negress, aged about forty years, was confined November 20, 1880, giving birth to twins—one a very bright mulatto, the other perfectly black. The black child was born first, according to the midwife's statement. The mother states that the children were begotten the same night, a negro man having intercourse with her first and the white man about an hour afterward.

The Prevalence of Venereal Diseases in Guatemala.

El Medico y Cirujano Centro Americano informs us that, by order of the political sub-chief of the State, all the prostitutes were subjected to an examination, for the purpose of ascertaining the prevalence among them of venereal diseases. Only five per cent. were found healthy. It does not appear, however, that any measures were taken to isolate the remaining ninety-five per cent. until they could be properly cured, for the editor strongly urges that since the alarming extent of the evil is known, practical and vigorous means should at once be adopted to limit it.

Statistics of Plural Births in Sweden.

During the hundred years from 1776 to 1875 inclusive, there occurred in Sweden, according to Dr. F. T. Berg, in *Hygiea*, 1880, page 331, 9,539,053 accouchements. Of this number 144,386 resulted in twin births, 2168 in triple, and 44 in quadruple births. He also shows that the relative proportion of plural births is gradually decreasing, while there is no diminution of the actual birth-rate in proportion to the population.

The President's Wound.

Our chief magistrate continues to improve up to the time of sending these lines to the press, and, indeed, from the reports published in the

daily paper, he may be pronounced substantially out of any visible and immediate danger. The country may be congratulated on this highly satisfactory result of what undoubtedly was a gunshot wound of great severity.

Items.

—One Alabama county has 9000 people, no lawyer and one physician.

—The plague is reported to have been "stamped out" in Mesopotamia.

—A virulent form of cattle disease is reported to have broken out in Nova Scotia.

—The "Siberian Plague" has broken out in some districts of Eastern Russia, and is said to be attacking the human as well as the bovine species.

—The celebrated Ricord is said to have written memoirs under the title "The 19th Century Seen Through a Speculum." They are not to be published till thirty years after his death.

—The subject of cremation is under the consideration of the Japanese Government, who have appointed a special commissioner (Mr. Monosuke Sano) to study the subject; he is now investigating the merits of the Italian system at Milan.

—The Aldermen of Vicksburg have passed resolutions protesting against the suspension by the National Board of Health of the quarantine station below their city, and asking that the station be restored and efficient officers be placed in charge.

—A claim for damages has been presented to the New York Board of Health, growing out of the death of a child from blood poisoning, alleged to have been consequent upon its vaccination by one of the city physicians. The claim will, no doubt, be held to be valid.

—The Allentown (Penn.) *Register* says: "A Jefferson county man, named Godfrey Reitz, had a stroke of apoplexy some days ago, and, to all appearances, died. While preparations were being made for the obsequies, however, he rose up and asked to have the funeral deferred. His friends willingly complied with the request."

—One thousand two hundred employees of the Old Colony Railroad have been examined for color blindness, in compliance with the Massachusetts law, and over forty engineers, firemen, conductors and others have been dismissed, because they have defective sight. Of this number is conductor Cowan, who has taken tickets for thirty-two years, and never had an accident happen to his train.

—A sick boy: "Oh, Doctor, I'm so glad you've come. I don't know what's the matter with Charley, at all. He complains of the febrile rise in his peritoneum, and he says his hypochondrion is all twisted out of shape. Oh, he's an awful sick boy, Doctor." "I should say. Must have been reading the Presidential bulletins." The doctor leaves a seidlitz powder and departs.—*New Haven Register.*

—Queen Victoria has given the Albert Medal of the first class (for gallantry in saving life), to Dr. David Lowson, of Huddersfield, England. He attended a child suffering from laryngeal diphtheria, and finding, after performing the operation of tracheotomy, that his patient's only chance of life lay in instantly clearing the tube, he himself sucked out from the tube the accumulated mucus. The heroic doctor was seized in a few days by a severe attack of diphtheria, and other dangerous illness supervened, compelling him to abandon his profession.

OBITUARY NOTICES.

—Prof. M. J. Schleiden, distinguished as a botanist, naturalist and physician, died, June 24th, at Frankfort-on-the-Main, in his seventy-eighth year.

—Dr. Maurice Raynaud, who had been chosen to deliver the address in French, at the approaching International Congress, and Dr. Gustave Chantreuil, an eminent obstetrician, both of Paris, are named among recent deaths. The former died of heart disease, the latter of peritonitis, said to have been caused by drinking a glass of iced beer when heated and fatigued after an obstetrical operation.

—To the other names of foreign medical men of eminence recently deceased, must be added those of Professor Lotze, of Berlin, author of "General Pathology and Therapeutics as a Mechanical Science;" Professor St. Claire Deville, the eminent chemist; and Dr. Mandl, the laryngologist, who, from ill health, had for some time retired from the active duties of his profession.

QUERIES AND REPLIES.

MR. EDITOR.—I would say, in reply to B. F. S., that I stated the exact fact; "they (the teeth) *presented the same appearance that a lamb's does when first born.*" I do not say that a lamb or a sheep has incisor teeth, and the inference he draws from my brief way of stating the case is not only incorrect, but improper.

Moziertown, Pa. L. L. DOTY, M.D.

Dr. T. M. M., of Texas.—You will find the formula for mist. rhei. et gentian on page 420 of last volume of the REPORTER.

Dr. Antonio.—There has been no instance recorded where a so-called hermaphrodite has completed the functions of both sexes, that is, both borne and begotten offspring; at least, we know of none.

Dr. M. K., of Ills.—The phosphated drinks now so popular in England are of questionable healthfulness, if taken as constant beverages.

Obstetrician, Pa.—From the reports and discussions we have seen we should think that Porro's operation is not growing in favor. The mortality resulting has been very great, and does not seem to decrease in the latest cases.

Dr. S K., of Conn.—The work you refer to is probably Dr. Paolo Mantagazza, *Fisiologia del Piacere;* we do not recall any other on that subject.

DEATH.

CONNER.—In Palmer, Illinois, on Saturday, July 16th, 1881, at 8 P.M., of entero-colitis, Alice Jones Conner, aged 1 year 1 month and 23 days. Infant daughter of J. J. Conner, M.D.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

BRIGHT'S DISEASE.

A CLINICAL LECTURE BY WM. PEPPER, M.D.

Delivered at the Hospital of the University of Pennsylvania.

Reported by Louis J. Lautenbach, M.D.

This patient, as you will see later, brings before you some very important questions of great practical interest. He was admitted on Saturday, in a stupid state ; we were, for the time being, destitute of any history. On the night of his admission he had two or three fits, since which time they have not recurred. As I said, he was in a stupid condition on his admission ; that afternoon he was in a delirious state, which, you may see, remains still, although he has markedly improved since his admission. The next day his sister came to the hospital and we obtained as much of his history as possible.

He is 62 years old, lives in Chester Co., never married ; he has been a builder and contractor ; his father died of heart disease, his mother of dropsy, at the age of 85, two brothers and two sisters died of consumption, one brother of strangulated hernia. He has surviving one brother who has rheumatism while another has heart disease. None of his brothers or sisters had reached advanced age when they died. Our patient is the eldest of the family. He has been an industrious, active man ; never drank liquor to excess ; there is no history of venereal disease, nor are there any traces of it ; he appears to have been very careful in his habits. He was always healthy, except he had once some fever, since which time he has always been somewhat deaf. Except this attack of one of the fevers, he was always healthy, until twenty years ago, when he became involved in business difficulties, since which time he has always talked strangely when discussing business topics ; on all other subjects he was perfectly clear and rational. Two weeks ago extreme œdema, involving the lower limbs and extending to the groin, appeared. At the same time the hands and the lower part of the face began to show signs of œdema. Since this time his sister knows nothing of him until his admission here last Saturday.

Examining our patient we see a distinct degeneration of the cornea ; an arcus senilis around the rim of the cornea ; the abdomen is moderately distended with gas, containing no water, it being resonant everywhere, even on the flanks ; a liver certainly not enlarged ; without enlargement of the spleen ; a very weak heart, the apex being felt with difficulty. His pulse, as he lies before us to-day, is slow, 52 in the minute, regular, a little labored. The radial artery is atheromatous, rigid, and a little rough. The heart is slow, deliberate and labored ; the first sound rather low, while the second is accentuated. There is no effusion in the chest nor around the heart ; there is no heart disease. The leg is distinctly pitting on pressure. His tongue is moist, not coated. He has a good deal of thirst but very little appetite, but he willingly takes all I allow him, two ounces of milk every two hours.

As you would naturally expect, we would turn to this man's urine : a dropsy coming on, without any disease of the heart or liver, we would turn to the kidney as the source of the dropsy. It is what might have been expected ; a case of Bright's disease.

Examining his urine, we find it strongly albu-

minous, giving a heavy precipitate by boiling, not being affected by nitric acid. Examining the sediment which deposits on standing, we find quite numerous tube-casts, also large amounts of renal epithelium.

Bright's disease with dropsy, with some mental derangement, with convulsions ; such a state would be called uræmia. This gives you a bird's eye view of the case.

We will inquire first into the diagnosis, and second the sort of Bright's disease, the kind of kidney which probably exists, and the probable cause of it, and the treatment of this and some of the other forms.

There are immense numbers of symptoms which would make you suspect Bright's disease; the mere enumeration of these would, were I to attempt it, probably not be concluded at the close of the hour. We will, however, examine some of them.

Nervous symptoms, such as giddiness, recurring headaches, mental obscurity, failure and confusion of memory. This group of symptoms are sometimes the first to indicate the presence of the disease. In nearly all the forms it is not only the kidney that is the seat, but very many organs are affected in various parts of the body. For instance, let us take the chronic gouty kidney, where it is hard, small, puckered and tough. Here the fibrous tissue of the organ is increased and the tubular structure is infringed upon. Beside this thickening of the fibrous tissue in the kidney the same tissue is thickened in whatever parts of the body it may be found ; the arteries are affected ; so also the arch of the aorta, as well as the valves of the heart; the fibrous tissue of the liver, spleen and spinal cord is increased. It is really a localization of a general condition more marked in the kidney than elsewhere; were it more marked in the liver we would have cirrhosis of the liver.

It may therefore be expected that in this form of Bright's disease we encounter very varied symptoms in different cases. Sometimes the nervous system particularly is affected, and we have loss of memory, mental derangement, delirium, etc.; again, we may have irregular vomiting, loss of appetite, irregular bowels ; the pulmonary organs may suffer most; we may have inexplicable dyspnœa, paroxysmal ; the circulation may be accelerated, the pulse irregular; and yet the cause of any or all of these may be the same, the kidney being the principal seat of trouble, but it not being observed until late in the case.

Malnutrition without evident cause may be dependent on kidney disease. We cannot possibly recognize all the cases of this affection unless we keep our mind perpetually awake to the possibility of their occurrence. We are never safe from fear of overlooking Bright's disease unless we make it a rule to examine the urine, not only of chronic, but also of acute cases. If you find albumen in the urine, and on microscopic examination decide the presence of tube-casts you have then made a certain diagnosis.

We will now examine the sorts of disease included under the head of Bright's disease, leaving out, however, the acute, and only take up the chronic affections. Of these we recognize three distinct forms, which are sufficient for all practical purposes.

1st. Chronic catarrhal, or desquamative nephritis.

2d. Chronic interstitial nephritis, or fibroid kidney.

3d. Chronic amyloid, or albuminoid nephritis.

Here we have three widely different conditions; different in the causes which produce them, different in the structure of the kidney which is caused, as well as different in the effects on the system which they produce.

We will consider the last, albuminoid degeneration, first. It is a state where the normal organic elements of the body do not remain, but are replaced by a structureless and inert material, which finally converts them entirely into this structureless material. This process may affect all parts of the body. It comes on when the system has been broken down by wasting discharges, chronic suppuration, necrosis or caries, attended by a profuse discharge of pus. In this case we have no cause like those mentioned. This degeneration, when localized in the kidney, gives rise to a form of Bright's disease.

In albuminoid kidney the secreting structure of the kidney not being able to reabsorb the albumen, it is found in the urine in large amounts. The urine is pale, transparent, copious, and contains a large amount of albumen. Tube-casts are numerous, usually hyaline. Specific gravity of the urine is usually moderate. As the vessels all over the body are affected, we have a large amount of dropsy, in form of œdema, also of ascites, as the liver is often enlarged.

Had this case had constitutional syphilis, or any exhausting discharges, or any evidences of enlargement of the spleen and liver, then we would know that he had this form. This is the most dangerous, hopeless and rapid.

The next form, chronic interstitial nephritis, is

the one most apt to be overlooked, the form for which you are ever to be on the lookout. Hardly any one will overlook either amyloid or catarrhal nephritis, the symptoms are so well marked to the patient, but here it is a gradual change, and is not noticed; it may last very many years. I have a number of cases where it has lasted ten to twelve years. It certainly may last ten, fifteen, twenty, or even twenty five years, under favorable modes of life.

The causes of this form are numerous: repeated congestions, being exposed to violent alternations of weather, all tend to bring on this form. It comes on very slowly, and is seldom noticed until late. Excess in the use of alcohol undoubtedly, in the end, sets up a tendency to a fibrous change all over the body. Slow chronic syphilis, the passage through the body of morbid matters, as arsenic and lead, passage of effete matters through the body, as in gout and various other conditions, tend to set up this form of renal disease.

At first, various minor matters of life, which, perhaps, formerly proved a source of pleasure, begin to worry him; his appetite is not as good as it has been; but no special failures of function are noticeable. A cardinal idea—where there is unexpected loss of health, the urine is invariably to be tested.

In this disease the urine is excessive, polyuria, as the blood pressure has been increased. There is little or no albumen present, as it is nearly all reabsorbed. Tube-casts are rare. We may look at five or six specimens of urine and examine five or six slides of each, and at length be rewarded by finding, after focusing superficially and deeply, a very delicate hyaline cast. The specific gravity of the urine is low. There is a tendency to fibrous change elsewhere; the vessels, retina, nervous system, lungs, heart, stomach and bowels all undergoing change and giving rise to various symptoms, according as one or other of the systems of organs is most affected. Gastric digestive derangements are quite common, frequently early in the case. There is no enlargement of the liver or spleen. The second sound, or valvular sound, is strong and heavy, as the arteries are contracted and the fibrous tissue of the valves are thickened.

Lastly, we have for study the catarrhal nephritis. It is the most frequent of all the morbid processes of the lining membrane of the tubules of the kidney. Its most frequent cause is colds, ordinary catarrhs, as well as the catarrh of the specific fevers, repeated slight exposure to cold draughts. In chronic catarrhal nephritis we are apt to have bronchial, gastro-intestinal and hepatic catarrhs with it.

As the kidneys are obstructed, the urine is scanty and high-colored; in the two other forms it is of a light color. Albumen is abundant in this form. The tube-casts are numerous, epithelial or granular. The specific gravity of the urine is not very high. Other diagnostic marks are the frequency of other catarrhs, the marked tendency to retention of effete matters, and we are very apt to have uræmia.

As we have seen, the diagnosis of the albuminoid form is very easy. The second or interstitial nephritis is also easy to diagnose when not complicated. The catarrhal form is frequently easy to diagnose. Very often, however, these forms are more or less blended or interlaced.

This case illustrates this blending very well. He was off his head on business, eyesight dim, generally run down, arteries rigid, cornea undergone fatty degeneration, left ventricle a little hypertrophied, with the second or aortic sound too strongly accentuated, no enlargement of spleen and liver; his digestion was disordered. So far all the symptoms would point to chronic interstitial nephritis, and undoubtedly he has had it. For about two weeks we have a different history. His mind wandering, he left home, and being exposed to the weather, which has been very changeable and trying, we would naturally expect a case of catarrhal nephritis of about two weeks' standing. He has had catarrhal nephritis grafted on the interstitial. We now find rapid interference with the functions of the kidney; dropsy coming on rapidly, seen in hands and feet, suppression of urine more or less complete, which in turn gave rise to the blood poisoning by the retained effete materials, and in consequence, he had uræmia. As to the quantity of urine, we find that he, in the last twenty-four hours, discharged thirty-six ounces of urine, of a specific gravity of 1.020. On examination there was found abundant albumen and numerous tube-casts. The twenty-four hours previous to this he discharged but twenty-six ounces of urine.

We have to deal with a mixed case. The causes were probably malnutrition, anxiety, anæmia, hard living, exposure, setting on foot an interstitial nephritis, and thus, two weeks ago, was grafted on this a catarrhal nephritis of a somewhat acute type.

Under what is termed uræmia, there are many conditions associated; it is not only urea which is retained, but all the waste matters are imperfectly removed. A condition of blood poisoning

by retained matters, and as a consequence, the circulation is at fault. We find quite often in these conditions œdema, often of the brain and spinal cord; the interfibrillar connective tissue is involved. It is a very complicated morbid condition; sometimes one element sometimes another preponderates.

In regard to the treatment of these cases, we will take, for instance, the patient before us. There are two distinct divisions of treatment through which an individual afflicted with chronic Bright's disease must pass. They are first the habitual treatment throughout months, and second, the treatment of the crises or special symptoms; the first for the production of a permanent effect, the second for the immediate condition. It is very important to recognize these two classes of treatment in all the forms of chronic disease. The main treatment is directed to the existing pathological condition, and we only take notice of special symptoms when they appear to be threatening or interfere with our regular treatment.

Among the temporary conditions which it is necessary to treat are vomiting, indigestion and diarrhœa, very common; and I don't care what form of Bright's disease it may be or what the treatment you are pursuing, you must for the time being discard your treatment and treat by suitable diet and corrective measures. Say, for instance, your treatment consists of the tincture of the chloride of iron, and you have been pushing it for some time, and the patient begins to vomit; you push on the chloride; vomiting still occurs; you give more of the chloride, and yet the vomiting remains. If you persist in such treatment you are more apt to kill the patient by breaking down the digestion than you are to cure him, be your treatment the very best possible for the pathological condition.

You must stop and get the condition rectified by a rigid diet, and by the use of creasote and soda, or of calomel. Again, we must pay special attention to the pulmonary condition; we may find marked dyspnœa. which may call for the use of dry cups, the use of carbonate of ammonium, and the patient to be put in bed until he is rid of the temporary embarrassment. Again, dropsy, with or without symptoms of uræmia, may call for the suspension of the regular treatment, the immediate condition demanding all our attention.

I am very anxious to put this man on bichloride of mercury and tincture of the chloride of iron, as soon as possible, but the time has not come yet; we must wait. We must get him rid of the dropsy and the nervous symptoms which are present, probably to a great extent due to the poisonous materials circulating in the blood, and possibly to the œdema which may exist.

In the first place, we must not use powerful stimulating remedies; the nervous system would not respond, and we would only add to the trouble by reflex irritation. We must enforce a rigid abstinence from stimulants and all foods, as far as possible, till the fluids which clog his system are absorbed. His heart sounds are not very poor, the pulse is regular and pretty strong; were it intermittent, irregular, weak, then we would use an opposite treatment, such as digitalis and alcohol, and the dropsy would disappear.

We are at present giving him a minimum amount of food, two ounces of skimmed milk every two hours, day and night. Already the dropsy has very markedly disappeared; it is scarcely noticeable in the hand, while the legs have become smaller. As long as he has an albuminous fluid as rich as beef tea under his skin we will get him to feed on that.

We will also try to free his system from effete matters, by the use of jaborandi. Last Sunday he received six doses, of ten drops each, of the fluid extract of jaborandi. That evening he sweated quite freely. On the 18th, Monday, his œdema having decreased then, one-half drachm of jaborandi leaves were put in four ounces of hot water and strained, and the liquid thrown into the rectum. This operation occasioned a most profuse sweat. This morning he is a little brighter. Since Saturday night he has had no tendency to convulsions. We will wait until to morrow, when we will give him another dose of the infusion.

We will administer to him the bichloride of mercury, with the tincture of the chloride of iron, as soon as he is in condition. This treatment is exceedingly good, particularly when there is a tendency to congestion. We will give one grain in two ounces of the tincture, and of this mixture we will at first give 10 gtts. or $\frac{1}{120}$ gram of the bichloride; this is a very small dose, it may be said, but it must be remembered that the membranes are often very irritable. If he can tolerate ten drops it will be increased to fifteen drops or $\frac{1}{80}$ gr., and afterward to twenty drops or $\frac{1}{60}$ of a grain. When we have once succeeded in giving twenty drops we will stay there and not try to increase it any more. It is to be given after food, three times a day. His only food will be skimmed milk, as it has been; the quantity, however, will be gradually increased. We will, beside, give him the infusion of jaborandi every other day, until he is rid of the dropsy.

Communications.

PLACENTA PRÆVIA.

BY L. N. DAVIS, M.D.,
Of Formland, Ind.

The only apology I have to offer in presenting the following case with comments, is that which the importance of the subject affords; for it not only justifies full and thorough discussion, but absolutely demands, at the hands of each one of us, the expression of every thought which may be savored with the least inkling of knowledge on so dire a condition.

Natural labor, with its manifold conditions and consequences, entails danger enough upon the sufferer, whose mission in nature, in this regard, must be anything but pleasant; much more serious, however, are the many anomalous conditions of parturition, which not only seriously compromise life, but in many instances render death almost inevitable.

Among the serious obstacles to natural delivery, I believe I may safely say that none are more formidable than is placenta prævia; none carries with it more terror; none can excite within the physician a greater sense of responsibility, and the necessity of prompt and decisive action.

Although post-partum hemorrhage is looked upon with "fear and trembling," and treated of in almost every medical journal you may wish to examine, I think statistics will certainly bear me out in the assertion that its victims do not much exceed those of ante-partum hemorrhage. The former may occur five times as often as the latter, but the per cent. of mortality is certainly not so great in the former as the latter. Very much is said which would tend to make one doubt the extreme frequency and gravity of post-partum hemorrhage.

While many will tell you that "eternal vigilance is the price of life," under all circumstances of natural labor; nay, even go so far as to depict, in the most forcible manner, the pitiful spectacle of the country doctor standing sorrowfully by the bedside of the newly-made mother, she a corpse, mourning because he did not use the hot-water injection; because he did not use the cold-water injection; because he did not inject Monsel's solution; because he did not insert the cold towel in utero, or a rag saturated with vinegar; almost an equal number will say that such treatment is not only not necessary, but actually hazardous, and all that need be done, in nine hundred and ninety-nine cases out of one thousand, is to give a full dose of ergot, prior to or immediately after the expulsion of the child, and proper attention to "Crede's Method."

Thus, we have not only a variety of opinions as regards the danger and frequency of post-partum hemorrhage, but also great diversity and variance in the mode of treatment; until finally, lost in the mist by such extreme drawing upon the imagination, we should scarcely know what course to pursue were such a case to come within our hands. In the first place, doubting frequency of hemorrhage after delivery, and in the second, should it occur, not being able to carry out the treatment of Drs. Barnes, Draper, Penrose, Playfair, Griffiths and Mann, we should feel almost justifiable in dropping our hands helplessly by our sides, and leaving the parturient chamber; or sinking into utter despair, trusting the woman to the efforts of nature, and thus avoid the pangs of a bad conscience; for certainly, if we carry out the treatment of one eminent man we shall conflict with that of another. In the treatment of placenta prævia, however, leading minds seem more thoroughly agreed, and almost unanimously concur in the opinion that delivery affords the only safety for mother or child, that one or both is liable to perish at any moment, even with the most skilled appliances and attention prior to the delivery of the child; this, they say, should be effected by version or otherwise, at the very earliest possible date that the os uteri will admit. Upon such advice it was that the attending physician and myself acted in the following case:—

April 23d, 1881, I was summoned with Dr. N. T. Cheneworth, to see Mrs. A. B., in her fourth confinement, on account of considerable hemorrhage attended with symptoms of labor.

The Doctor and myself arriving about the same time, he informed me that he had been called about three weeks previous, owing to a very similar condition of the patient; that it was about a month before her expected confinement at that time.

He stated she had been suddenly aroused from her sleep by a flow of blood, attended with slight pains and general uneasiness.

On examination he found the hemorrhage inconsiderable in amount, and the pains of a fugitive, irregular character; he discovered the os very high up, above the brim of the pelvis, thrown forward, and not dilated in the least; with lips and neck thick, vascular and fleshy, to a striking degree. Upon abdominal palpation the Doctor was struck with the unusually prominent, fleshy condition of the supra-pubic region, while over the fundus uteri it seemed as though

nothing but the abdominal parietes intervened between his hand and the child.

Upon such revelations, rather than the periodical hemorrhage, the Doctor came to the conclusion that he had a case of placenta prævia. He gave a dose of morphia, with gallic acid, stayed over night, left instructions as regards care of patient, and advised the husband, on recurrence of the hemorrhage, to send for him and myself at the same time.

We found the os, which was so high up as to barely admit of the most imperfect examination, still undilated, pains weak but distressing; beginning one place and shifting to another, without the least regularity or apparent effect, except the slight discharge of blood that attended each one.

At 9 P.M., hemorrhage being on the increase, we introduced the tampon through the speculum. First, a carefully folded cone-shaped piece of surgeon's lint, saturated in Monsel's solution, was placed within the cervix, as far as possible, then the vagina was thoroughly packed with similar material, withdrawing the speculum as the material was introduced. The "T" bandage was applied and fluid extract ergot given, in from half to drachm doses, from one to two hours apart, with an occasional dose of gallic acid containing one-eighth of a grain of morphine.

Tampon seemed to control hemorrhage completely for the time being, and we congratulated ourselves upon the prospects of an early delivery, which we thought the os would admit of in a few hours, at least.

At 2 A.M. slight hemorrhage was perceptible around the tampon. Pulse about 100, fair volume and strength, but noticeably irregular, varying fifteen or twenty beats in the course of a few minutes. Patient suffering no special ill-feeling more than might be expected under the circumstances. While matters were thus favorably progressing, we decided not to interfere with the tampon, at least not until we felt satisfied that the os was sufficiently dilated that we might deliver at once.

9 A.M. Hemorrhage more marked, pulse slightly increased and still irregular. Patient complains of burning pains through the bowels and stomach.

Not yet having been able to determine the presentation, we thought it expedient to examine further, and deliver if possible; but to our great surprise, we found but little change in the condition of the os.

We immediately made an effort to introduce Barnes' dilator; but the internal os not being larger than a three-cent piece, and the placenta pressing firmly over it, we found it utterly impossible; we therefore re-introduced the tampon, as hastily as possible, in the manner before described. Continued ergot, gallic acid and morphine.

At 5 P.M. there had been quite an escape of blood for some time, and it became evident that our patient's strength was rapidly wasting. We resolved, therefore, to again take our chances in the possibility of the os being sufficiently dilated to admit of delivery.

Informing all concerned of the inevitable result of relying upon the tampon, and the efforts of nature; and also of the extreme likelihood of death in any event, we proceeded to remove the tampon, which was followed by a considerable gush of blood; meanwhile we were allowing the patient to inhale a little chloroform. On examination the doctor found the os about the size of a silver dollar and somewhat dilatable. As the blood was gushing in torrents there was no time for parley. While the doctor was performing the operation of turning, I lowered the head and ligated the extremities.

On introducing the hand and separating the placenta, which he found still attached around the whole circumference of the os uteri, it was found to be a head presentation. In less than five minutes version was effected.

After allowing the hips to remain in the os for a short time, to compress the bleeding vessels, feeble pains again returned, under active pressure over the womb, by which, with the aid of slight traction, the child was delivered.

Although our patient was pulseless and pallid, she was perfectly conscious, the slight effect of the chloroform having passed off, which gave us faint hope that she might yet rally. After about thirty minutes of diligent labor for this end, which consisted in giving stimulants by the mouth and hypodermically, expression of the womb, introduction of the hand in utero, and friction to the extremities, she expired. The child was dead born.

Several points of special interest, in cases of complete presentation of the placenta, have occurred to me, upon which, so far as my limited knowledge extends, there seems to be but little authority.

1st. Dilatation is necessarily tardy in all cases of central insertion of the placenta; owing to the mechanical resistance which the circular fibres of the os and neck meet from such attachment.

2d. The result is necessarily fatal in all such cases, owing to the tardiness of dilatation without the intervention of art. Many cases are reported to the contrary, nothwithstanding; as, for instance, those in which the head bursts through the placenta, and delivery is effected by the natural efforts. Dilatation, however, must have previously been effected. In deference to such statements I would say, it is reasonable to suppose that they were not cases of complete presentation of the placenta, but more or less incomplete, thereby allowing the head (if it be a head presentation), to come more directly within the grasp of the circular fibres, at the point of insertion, exerting more direct pressure against the bleeding vessels.

3d. Among the many conditions, other than anomalous presentations of the child, which may tend to keep the uterus and its contents high up above the brim of the pelvis, and beyond the ordinary touch, after labor has commenced, placenta prævia *should be regarded as common*, more especially if the presentation be complete and the pelvis slightly contracted.

4th. The extreme attenuation of the fundus uteri, together with the fleshy prominence above the symphisis pubis, are points in the physical diagnosis of placenta prævia worthy of notice, where other symptoms exist.

5th. Irregularity of the pulse, aside from its frequency, is of the same value as a symptom of ante-partum hemorrhage that it is of post-partum hemorrhage, whether internal or external.

ABOUT ERYSIPELAS.

BY DR. EDWARD H. SHOLL,
Of Gainesville, Ala.

In the May, 1875, number of the Boston *Journal of Chemistry*, an editorial on the subject of "Therapeutical Enigmas" appeared. The title above indicated its second division, and to this alone I wish to call attention, for whatever may be the results of treatment in any acute case, the indications from the subject and surroundings are ordinarily so plain to the attentive physician that he "may read that runs."

There are those, however, who, from some inherited or obtained vice of constitution, are afflicted with a tendency to a recurrence, at irregular or stated intervals, of this disease, with varying types of severity and times of duration.

It was for the benefit of this class the article was intended, and for whose sake I carefully read it, as at the time there were those under my care whose lives were at annual or more frequent hazard, in spite of all hygienic and medical precautions.

The physician who penned the article had given it fifty years' practical test without failure, his knowledge of its prior history dating back to the year 1801 or 1802. The suggestion was from an old lady to an old lady friend of hers, who was a martyr to the disease, and was simply this:—

"Have some green glass beads strung on a silk string, to make a necklace, to which, by a silk string, attach a small silk bag filled with powdered sulphur. This to be constantly worn."
"Only this and nothing more."

In the face of such a prescription it was idle to theorize; what I wanted was fact and experience; so I determined to put the thing to test at once, verify it or upset it, and in due time, after years of trial and observation, to give the results of that experience.

Six years have passed. Some under my care and observation, others, from their commendation, have tried it. What the conclusion from a longer and more extended trial, of course, I cannot say. What, however, I now say is, that to this time it has not failed in any case to secure complete or nearly entire exemption from attack, and to-day there are some of my patients, among the wise, and gentle, and practical, and scientific, who would not, and openly avow it, sell their simple string of beads and bag of sulphur, constantly worn around the neck, if they could not duplicate it, for ten thousand dollars.

My first patient, a gentleman in his seventy-first year, read the journal soon after it came. For twelve years, in May and June of each year, he had been very sick with erysipelas, at times nigh unto death. His time was almost at hand, he needed but my advice to get the beads, which I at once gave. He put them on, and that year escaped, for the first year in thirteen, entirely. In his case it involved the face and scalp, subjecting him to great discomfort, suffering and danger. Last year, about the ordinary time for the disease to appear, having for five successive years escaped anything of the disease save slight tingling reminders, he grew more careless. His string broke. The beads and bag were laid aside. In a very few hours a severe attack of erysipelas ensued, very promptly, however, responding to treatment. The beads were at once replaced. This year he has had no outbreak, only an occasional tingling sensation on the forehead. To him, his beads are far more precious than were each one the Koh-i-noor.

The second case, a lady of forty-five, had a

similar history of invasion of face and scalp, several times annually, and of extreme severity. In this case, also, there has been the record of almost complete exemption.

Last year, being sent for, I found her suffering with a sharp attack of erysipelas of the face, with great pain. At once I asked her as to her beads. The reply was, "a few days ago my string broke, and they laughed at me so for wearing them that I laid them aside, and my disease at once returned." She was speedily relieved, and since then has required no persuasion to wear them, and has to this time escaped any further invasion.

The third case was a lady of middle age, who for some years had never been entirely free from erysipelas. She had been carefully treated. When she came under my care I found the right ear inflamed and swollen, the meatus almost closed, with a semi-purulent exudation from its surface. Despite some weeks of careful constitutional and local treatment, I failed to entirely relieve her.

I ordered her to get the beads. From the time she put them on she began improving, and now for nearly six years, has been completely exempt from any evidence of the disease. To-day, she would not exchange her simple necklace for one of rubies.

Other cases are simply like these. The last one to whom this course was recommended was an intelligent physician of Miss., whose contributions to the REPORTER assign him a place as a thoughtful man. A sufferer from erysipelas, he sought my advice. A general line of treatment was laid down, and he was instructed also to wear the beads. In his last letter to me he says that since he put them on he has had no erysipelas at all. Thus ends the practical part of its history to this, July 1st, 1881.

Many, perhaps, never saw the original article. Many glanced at it, perhaps, with incredulity, and since then thousands of young physicians have begun their active career.

Through the pages of the REPORTER this will reach thousands. Through other journals, that I trust will copy this and extend its circulation, it will reach many thousands more. These I ask, under suitable circumstances, to test it, for what I have written I have written deliberately, in the face of all its peculiar surroundings, and what I say I know.

If its possibilities to others shall prove even but a portion of what I have seen and know, it will be impossible to estimate the vast amount of human suffering relieved, and the many valuable lives saved, by what seems but an idle fancy, and yet is a mysterious fact.

HOSPITAL REPORTS.

HOSPITAL COLLEGE, LOUISVILLE.

SERVICE OF PROF. DUDLEY S. REYNOLDS, M.D.

Reported by A. H. KELCH, M.D.

Kerato-cyclitis.

GENTLEMEN:—I invite your attention to the case of Mr. R., aged twenty-three, single. He lives in central Kentucky, and has come here to consult me about an affection of the left eye, with which he has suffered since infancy or early childhood. The first thing we notice is that he does not open the left eye as widely as the right. Then we observe, on closer inspection, that the cornea is quite hazy, presenting the appearance of ground glass. Oblique illumination discloses the fact that the anterior chamber has a depth of fully three-eighths of an inch, which is quite abnormal.

There is a delicately defined pink-tinted zone encircling the cornea. This is due to an abnormal fullness of the capillary vessels in the scleral wall, in the immediate vicinity of its union with the cornea. He has suffered occasional attacks of pain during the last twelve years, though the eye has been seldom more suffused with blood than it is at present. Now, there are a few enlarged veins pursuing a tortuous course over the scleral surface; these vessels are in the conjunctival membrane, and show that there is some morbid process going on in the uveal tract. The pink-tinted zone encircling the cornea, the enlarged and tortuous veins of the ocular conjunctiva, the abnormally increased depth of the anterior chamber, and the contracted pupil, all go to show that there is chronic inflammation in the iris and the ciliary body. The haziness of cornea, with the ground glass appearance presented by its external surface, is quite characteristic of a low grade of inflammatory action. He has an affection known as irido-cyclitis, or kerato-cyclitis, which means an inflammation of the cornea, the iris and the ciliary body. On dilating the pupil with hematropia, we find opaque striæ in the crystalline lens, and large masses of yellowish material floating in shreds through the vitreous humor. Whether these floating bodies in the vitreous are the remains of partially disorganized blood clots, or detached portions of effused lymph from the choroidal surface, or the remains of broken down portions of the hyaloid membrane, it is difficult to determine; but in a clinical point of view it matters not which one of these, or whether they are composed of portions of all the substances named. It is scarcely probable that any kind of treatment will cause them to disappear. They show that the vitreous humor has been disorganized, that it is opaque, fluid, and that it is disturbed by the presence of these floating masses of foreign material. Now, Mr. R. is a theological student; as you observe, he is about 6 ft. 2 in. in height. He weighs 185 pounds, and has always enjoyed robust health.

He is a man of great physical power, and has been a student for so long a time that we wonder, with the character of disease in the left eye, the right has never, until the last few weeks, shown any signs of irritation whatever. He has suffered lately from a sense of soreness and fatigue in the right eye; letters appeared to run together, the lines to overlap, and the whole appearance of the page blurred; so he was obliged to discontinue his studies at night. Examination with the ophthalmoscope reveals no sign of morbid action in the right eye. It appears that he has hypermetropia. The exact character of the error of refraction has not been determined, however, and no attempt will be made to do so until the treatment for the relief of the irritation in the left eye shall have terminated. We hope to arrest the further progress of the inflammatory process in the uveal tract by the united effects of both local and constitutional measures. The local treatment shall consist in the removal of about one-sixth of the iris in the superior region, the iridectomy to extend from the pupillary margin quite out to the periphery. In order to secure this an incision, as you see, is made just within the scleral tissue, as nearly upon the plane of the anterior surface of the iris as it is possible to make it. You see now the iris floats out between the lips of the wound as the aqueous humor escapes. Seizing the iris, I now snip it off with the scissors, which completes the operation. A gentle amount of pressure and rubbing with the end of my finger causes the imprisoned portions of iris to retract from the angles of the wound in the sclera, and the eye is now closed with a portion of dry cotton wool, over which some straps of adhesive plaster are drawn, from the cheek to the forehead. This is to remain for two or three days, unless he should be seized with violent pain in the eye. Then the dressing is to be removed for the purpose of determining the cause of the pain, and to allow the opportunity of making such local applications as would tend to its relief.

For the present he is to have two grains of calomel and four grains of extract of belladonna, made into eight pills, one of which he is to have every five hours; in addition to this he is to have ten grains of quinine every night for six consecutive nights.

Now, a word as to the probable cause of this complicated affection. Mr. Hutchinson has taught us to regard interstitial keratitis, with the ground-glass appearance of the surface, as indicative of inherited syphilis. We know, too, that chronic cyclitis not due to mechanical injuries of any kind are most likely the result of syphilis, or local tubercular deposit.

In syphilis the tension of the globe is reduced, as we find it in this case. In the tubercular forms the tension is likely to be greatly augmented and to go on increasing until a veritable dropsy of the eyeball is developed, a fair specimen of which was presented for your consideration in the case of Mr. L., whose epilepsy was cured by the removal of a dropsical eye, at this clinic. It is tender ground to explore the history of a case like Mr. R.'s, who comes from a family of high social position, and who is himself a young man of upright, sterling traits of character, a theological student, a young man absolutely without guile. It may be that I misunderstand, and consequently misinterpret the phenomena of his disease, but I am obliged, with the lights before me, both from my study of the literature of the subject and from a somewhat extended clinical experience, to believe that he is the subject of inherited syphilis; yet I would not tell him so, and I impart it to you as one of those professional secrets which you are in honor bound to keep sacred all your lives. These are things that may be discussed in confidence only, and there are many such. Before you have practiced your profession many years, you will, doubtless, most of you, have encountered unmistakable evidences of both acquired and inherited syphilis in members of the best families of the land, in persons holding the highest social rank, in persons whose habits are believed, by those who are supposed to know, to be absolutely perfect in purity. It is no part of your duty to explain everything you think, or even to hint at some things you absolutely know. The presence of syphilis may generally be determined by the local appearances, without regard to previous history. If the diagnosis depended on the history of the case I should always question it, unless it was straightforward, positively asserted, and fully in accordance with the history of syphilis. You cannot believe half the people who tell you they have syphilis, and how much less may you believe those who say they have it not. Now, when the wound we have made in this man's eye shall have healed, we shall give him iodide of potassium, beginning with doses of five grains three times a day, gradually increasing by the addition of five grains every four days until he has been made to suffer the effects of iodinism, or until all signs of irritation shall have disappeared from the eye. The idea being to give him the drug until its therapeutic effects are manifested, or until its toxic effects appear. If the toxic effect be manifested before the therapeutic effects we desire to obtain have been achieved, we shall diminish the frequency of the dose until the unpleasant symptoms disappear, and gradually resume it and push it vigorously until the return of the toxic effects, or until the therapeutic effect has been secured. He is to have, now and then, in addition to the iodide of potassium, an occasional dose of quinine, always preceded by a mild aperient, and you may even venture to give, for that purpose, a single dose of calomel, combined with an equal proportion of chlorate of potash, which is with me a favorite combination. I learned it from an old practitioner, who assured me he had been pleased with the mildness and uniformity of the effects of this combination, and had enjoyed a favorable experience in its use extending over a period of full thirty years. I believe, as an aperient, that from three to five grains of calomel, with an equal proportion of chlorate of potash, rubbed up together, taken upon the tongue, a little water being employed with which to wash it down, constitutes one of the mildest and most efficient combinations it is possible to find.

Foreign Body in the Eye.

Case 2.—Dominic G., æt. 52, comes here with the statement that in firing a gun a piece of the cap struck him in the eye. On examination it is perfectly certain that the foreign body went into

the lens, and, as it is not likely it could pass out again at the same opening after penetrating to such a depth, it is, in all probability, still in the eye. Three weeks ago the injury was received; and the question is now, what is proper to be done. He has had no inflammatory reaction; because, if he had, the pupil would be adherent to the capsule of the lens. The area of the pupil remains clear, and I am almost sure the cap lies in contact with the ciliary body, just in the direction indicated by the point of puncture. The only thing to be done in a case of this sort is to make an iridectomy covering the part where the body probably lies, and, if possible, remove it. It is possible by this method I may save the vision. The lens having been damaged must be removed by extraction at the same time the iridectomy is done. The foreign body being successfully removed and the opaque lens extracted, the eye is in good condition for recovery.

Chronic Laryngeal Catarrh.

Case 3.—Mr. B., æt 26, resident of North Carolina, a young man apparently in good health, small in stature, and weighs about 125 pounds. He has always enjoyed good health, until, within the last few weeks, he has had a gradually augmenting sense of discomfort in his throat, accompanied at times by hoarseness and an almost incessant tickling sensation, which provokes a distressing cough. He has been examined by a very careful and painstaking observer, one of the most eminent practitioners in the city, who has given it as his opinion that this gentleman has tubercles in the throat, though no evidence of their presence in the lung substance could be found. The diagnosis is made on the ground that some distant relative died, about the age of 30 years, of phthisis pulmonalis, and that this young man resembles that relative both in stature and features. He has been warned of the probable issue, and is much alarmed. Examination with the laryngoscope discloses, first, a chronic catarrh; further inspection shows that, by continuity of structure, this catarrhal inflammation, of the muco-purulent type, which means an advanced stage of a somewhat violent character of inflammation, has advanced on through the pharynx and larynx, into the trachea. There are now masses of muco purulent material distinctly visible upon the walls of the trachea. The vocal cords are abraded at several points along their margins, evidently due to the almost constant coughing. The contiguous structures being inflamed, the cords themselves are congested, and the constant coughing has finally resulted in the blowing off, or complete separation from the surface, of a portion of the epithelial covering. Now, the mere absence of the few epithelial cells from the surface of the vocal cords, in a case of this kind, should create no serious apprehensions, and offers no sort of evidence of any tubercular or other constitutional affection. It is plainly due to mechanical causes, and will certainly be repaired as soon as the cause which produces it can be removed. Now I hope, sir, you will eat no cooked fruits, partake of no confections or pastry; that you will take an abundant supply of animal food—fresh meats, of all kinds best suited to your appetite, of the plain, cooked vegetables of the season, and just as much ripe fruit, uncooked, as you may choose to eat; in fact, a few oranges, a few grapes, some California pears, and even bananas, would likely tend to improve your digestion, which, it seems to me, is not bad. You have a good complexion; your pulse appears to be about normal; your respirations, though slightly disturbed, do not indicate pain; you have exhibited your power of inflating the lungs, and your chest expands quite as much as it should; your tongue is clean, and were it not for this local catarrh I should pronounce you a well and hearty man. Now, sir, I want you to inhale from a hand atomizer the cold spray of a solution of ten grains of the bromide of potassium to the ounce of water; I want you to force some of this medicated spray into your nostrils, and clear out all the accumulated secretions from these passages, and it must be used sufficiently often to keep both the nostrils and throat absolutely free from morbid matter.

As you have had this disease for several weeks, and have an abundant, in fact, a superabundant, discharge from the inflamed surfaces, benzoic acid, in the form of lozenges, made after the directions contained in the London Throat Hospital Pharmacopœia will tend further to improve your condition. Be assured, sir, there are no evidences of tubercular deposits in any of the structures visible to me, and, as you have been assured by one of the best practitioners in the city that there are no signs of tubercular deposit in the lungs, you ought to be satisfied that you are in no danger for the present. I beg you not to believe the story that because some distant relative died of consumption, and you are said to resemble that relative, you are in any way likely to die of a similar disease. I do not undertake to say that you will never have consumption, but I do affirm most solemnly that the disease in your throat and nose is in no way akin to any form of tuberculosis with which I have an acquaintance.

Editorial Department.

Periscope.

Alcohol as a Food.

In a paper read before the Philadelphia County Medical Society and published in the *Medical Times*, July 16, 1881, Dr. H. C. Wood observes:—

Although I hold that the habitual use of alcohol is to well-fed persons not only unnecessary, but positively harmful, it seems to me that in many cases of illness and in those periods of life when by reason of age the body waxes weak, alcohol is possessed of great value. Under sixty years of age the daily employment of wine may

for most persons be very well discountenanced; but after this period has been reached, I believe the moderate employment of stimulants is very useful. The progressive failure of bodily powers points to the use of a substance which shall aid in digestion and readily supply force. In the later years of life even the narcotic influence of alcohol is of value, easing the restlessness, the slight discomforts, the suffering of nerve-failure incident to failing vitality.

The question whether alcohol has food value in disease is one not easily answered by positive evidence, because the narcotic properties of the substance are so marked as often to mask its influence as a food, and because we rarely dare to employ alcohol except with an abundance of other food. The principles already outlined are, however, as applicable in disease as in health. Recent researches in fever have determined that the excessive heat production is dependent upon excessive changes in the stored materials of the body, and it is improbable, though not impossible, that alcohol is capable of taking the place of these, and, by being, as it were, vicariously burned, saving the tissues. The value of alcohol in low fevers, therefore, probably depends upon other qualities than its usefulness as a food, although our knowledge of fever processes is yet so imperfect that it is necessary to speak with great reserve.

In chronic wasting diseases I believe alcohol has an actual food value, besides being a most powerful aid to the digestion of other food. Arguments upon this point do not seem required, and it is, of course, very difficult to give actual clinical proofs, because we always employ alcohol with other foods and remedies.

The question as to the best method of administering alcohol when it is used for its sustaining powers is of vital interest.

Two general propositions will, I believe, command almost univeral assent. First, the alcohol must be given in a dilute form; second, it should be given along with other food. Provided these two rules are observed, I do not think it makes much difference in what form the drug is administered. In chronic diseases malt liquors have both advantages and disadvantages. They represent food and drink, are less apt to be abused than are stronger liquids, and by virtue of their bitterness have some tonic properties; on the other hand, they sometimes disagree with the stomach. As they contain some nutritive material, there is perhaps more tendency to administer them apart from food than there should be. The amount of solid constituents in a pint of malt liquor varies from over two and a half ounces of dry residue in the strongest English ales to three quarters of an ounce in the weakest ales and beers. The ales and beers usually drunk in this city probably range from one to two ounces of solid contents to the pint. The nature of much of this solid matter is not known, but albumen, bitter and resinous principles from the hop, earthy salts, grape sugar, glycerin and a number of complex acids have been recognized in it. The tendency to grossness seen in beer-drinkers undoubtedly largely depends upon the solid constituents of the beer which is taken, and seems to me to indicate the proper medical use of malt liquors, namely, that they are especially to be employed in wasting diseases, *i. e.* where there is tendency to the loss of the bodily fat.

In regard to the choice of malt liquors, I do not think there is any other than what we may call personal grounds for selection. That which suits the palate best usually suits also the stomach best. The choice should always settle upon the ale, porter, or beer which can be used with least inconvenience to the stomach; and when all malt liquors produce "biliousness"—*i. e.*, gastro-intestinal derangement—wine or diluted spirits should be substituted. As the malt liquors contain nutritive material, it is less necessary to give food with them than it is with whisky or wines. Nevertheless, it is preferable in most cases that food should be taken with the ale or beer.

Actinomeris Helianthoides.

Dr. I. J. M. Goss, of Marietta, Ga., writes to the New York and Chicago *Medical and Surgical Journal*, for July, 1881:—

My attention was directed to it several years ago, by reading Dr. Mahoney's *Cherokee Physician*, a little volume taken from Richard Foreman, an Indian Medicine Man, of the Cherokee tribe. In that little work, Dr. Mahoney recommends the actinomeris helianthoides very highly, in gravel and stone in the bladder, and quotes Dr. Furk's pamphlet, in which Dr. Furk says: "I have cured gravel of long standing in four or five days, with this root in alcohol or good spirits; and I have never failed, and until I do, I will continue to believe in its efficacy. I could cite many cases of the most notorious kind, but in this small work I will give but one. A gentleman in North Carolina had been so afflicted for fifteen years, and had tried so many remedies that failed, that all hopes of a cure were abandoned. He had to draw his water with a catheter. He called upon me, and I furnished him this root, which he says cured him in four or five days." Now, I think this was a case of retention from want of expulsive power in the bladder, and one very suitable for the actinomeris to display its power. This plant, one of the sun flower family, grows on uplands and sandy bottoms. It grows mostly in fence corners, where it is protected. It grows from five to six feet high, has a bushy top, petals of flowers yellow, much like the artichoke, and blossoms from the last of July through August. The stalk has four welt-like edges, which makes it appear square; but when these edges are rubbed off the weed is round, and about the size of a pen-staff. The root is the part used. This plant has many roots growing out in every direction, and resembling small potatoes, which, when broken, exude an oil, similar to fresh turpentine, which turns to resin when dried. It grows in middle and upper Georgia, North Carolina, South Carolina, Tennessee, and perhaps in many other parts of the United States. It is not mentioned in many works on botany, hence I am particular to describe it so that any man may find it where it grows.

It is one of the most powerful diuretics in the

vegetable kingdom, and seems at the same time to exert considerable tonic power upon the bladder. I have used it in some marked cases of retention of urine from atony of the bladder, and have succeeded after having failed with the best of remedies of this class.

(See the author's works for full details.)

I have treated several extreme cases of dropsy, in old people, in which all my usual favorite diuretics failed to get up active diuresis, but after resorting to this article, in the form of strong tincture, I succeeded in removing the superabundant water from the blood in a short time. A physician who lives in upper Georgia, to wit: Dr. G. B. Dillard, informs me that the common people in his county use this root a great deal in all kidney and bladder affections, and they call it *Diabetes* weed, from the powerful diuretic effects it produces. I do not assert that it has any power to dissolve stone, yet I am not prepared to disprove it, but I have treated cases of the phosphatic diathesis, in which the patients were passing large quantities of the phosphoric sand, and this article, alternated with five grains of carbonate of lithium, relieved this condition in a few days. In chronic cystitis and nephritis we have a valuable remedy in the actinomeris helianthoides. I have treated quite a number of cases of old chronic cystitis and nephritis successfully with this remedy.

The dose is one to two drachms of the tincture every hour.

Management of Natural Labor.

Dr. F. A. Spalding, of Detroit, in a lecture delivered in the Detroit Medical College and reported in the *Indiana Medical Reporter* for June, 1881, says:—

If, when called to a case of labor, you find that the woman have threatening pains only, give her an anodyne—as morphia. If she be really in labor, *i. e.*, if labor pains have commenced, you will direct that the bed be prepared for her. Upon an ordinary bed sheet you will place an oil cloth or rubber blanket, and over this a woolen quilt. This woolen quilt will absorb all the blood and discharges; and after it is removed with the rubber blanket the patient is left on a dry bed. Most physicians will now sit down and wait for something to turn up. Sometimes they may wait for twenty-four hours or more. This is unnecessary. If labor does not progress well, you can make pressure on the uterine neck during every pain. This will stimulate uterine contractions. Ascertain the position of the fœtal head and the condition of the pelvis. If the pains be sluggish, do not hesitate to give your uterine motor stimulants, ergot, quinine, alcohol, strong coffee, or biborate of soda. The action of ergot must be aided by pressure upon the uterine neck upward. The next thing to assist labor is to rupture the bag of waters. The pressure on the perineum is of no account.

The best ligature with which to tie the umbilical cord is common spool thread doubled, but not twisted; on each end of which a knot is to be tied. To deliver the after-birth, twist the cord around your finger, and make gentle traction, at the same time holding and pressing the uterus between the thumb and the index finger of the free hand, to assist uterine contractions. Wait a few moments before removing the placenta. After labor has ended you apply an abdominal bandage. The best is made of roller toweling, as it does not stretch. In applying it the greatest pressure is brought to bear on the uterus. By the method I have given you to-day I have treated hundreds of women in labor. The average duration of labor in my cases is two hours—the longest labor not over four hours.

The Treatment of Chorea.

Dr. Edward C. Mann, Physician-in-chief to Sunnyside Retreat for Nervous Diseases, the Opium Habit and Dipsomania, New York City, says, in an article on the Nature, Pathology and Treatment of Chorea, published in the *Alienist and Neurologist* for July, 1881:—

In the treatment of chorea I endeavor to give the nervous system *rest* and *nutrition*, obtaining the former by avoidance of excitement, early hours, and the calmative influence of warm baths at bedtime. The latter by using phosphated cod-liver oil, or the oil in connection with phosphide of zinc, one-tenth of a grain in pill, three times a day. Gentle gymnastic exercises are very valuable and should, by no means, be neglected. My favorite remedy, and the one which seems to be the nearest to a specific in chorea, is arsenic, which I use hypodermically. I use a mixture of equal parts of Fowler's solution and water, to avoid any local irritation which I at any time find induced by the undiluted Fowler's solution.

By using even the pure Fowler's solution I have found the irritation very trifling, and it is rare, especially in children, to find any want of toleration of the drug in the system. Very rapid improvement generally takes place under this treatment, from the first, and the patients gain flesh. I commence with three minims, and inject subcutaneously, for a week, every other day, and on the second week increase the dose to five minims every other day, increasing two minims each week, and in from one to two months a cure is obtained. In recent cases, a month or six weeks will generally suffice, while in old cases sixty or seventy days may elapse before a cure is accomplished. In troublesome cases I also use, as adjuvants, ether spray or ice bags to the spine, and electricity. By this method of using Fowler's solution the gastric disturbances which are produced when the medicine is given by the stomach are avoided.

A Case of Consciousness During an Epileptic Seizure.

The following case is reported in the *Alienist and Neurologist* for July, 1881, by C. W. Clark, M.D., Assistant Superintendent of the Asylum for the Insane, Hamilton, Ontario:—

J. E. C., male, aged 42; very strong, healthy man. Has been an epileptic for more than thirty years, and an inmate of the asylum for two years. Before and after epileptoid seizures is violent and dangerous. Had been free from an attack

for nearly a month when the one reported upon took place. On passing through the wards, on my "morning round," my attention was drawn to the patient, who seemed to be in a very peculiar condition. He was seated in a chair and *appeared* to be perfectly unconscious. His muscular system was under no control, and he was suffering from clonic convulsions, which his attendant informed me had been kept up all morning (this was about eleven A.M.). The patient was placed in a bed and visited again in the afternoon. The convulsions still continued, with the difference that some of them were not tonic in character. The violent muscular contractions caused him to grind his teeth, clench his hands, etc. The face was congested. There was no doubt about the seizure being *epileptic*, but the form of convulsion was so remarkable and unusual that the patient was visited many times during the day. The spasms ceased in the evening. Next morning the patient was worse, and refused food. In two days he went about as usual. Not long after that he came to me and asked if I thought he had been suffering from another attack of epilepsy. I said he had. He then told me that he was conscious during the seizure, and, to prove his assertion, detailed conversations which I had held with the attendant at the time of the attack. As he repeated correctly what had been said, and described accurately the positions we had stood in, there could be no doubt in regard to his consciousness during the seizure.

As might have been expected, the patient's muscles were very sore for some days after the attack.

The Placenta as a Tampon.

The following remarks by Dr. J. H. H. Burge, we take from the *Proceedings of the Medical Society of the County of Kings*, for July 1881. It refers to the value of the placenta as a natural tampon. He says:—

It matters not that this practice is unsupported by any good authority; I am convinced from experience and observation that post-partum hemorrhage is oftener caused by hurrying the after birth than by anything else. All the excitement and anxiety, the worry and weariness of a tedious or difficult labor demoralizes the attendants, so that fifteen minutes seem an hour. In quick succession are heard the questions: "Is all right?" "Why doesn't it come?" "Do you think it's grown fast, doctor?" etc., etc. The mother persists that it never was so long before; that Dr. Blank always took it away as soon as the child was born. Is it any wonder that the doctor gets a little impatient, too? Now if there is no pain, and no obvious occasion for interference arises, I beg, for the woman's safety, that no traction on the cord, no searching for the placenta edge, no officious meddling of any kind be indulged in. Let the patient be watched. See that the uterus be well contracted, and you may feel much surer that it will remain so, if you let the placenta alone. It will be soon enough to interfere when the first shock of labor is passed.

If the placenta is in the womb, its presence there is the best possible stimulus to contraction, better, in my opinion, than any one's hand, and if, from any degree of inertia, the womb is indisposed to contract, then the placenta (if detached) is the best possible tampon. If it has been extruded from the womb and lies in the cavity of the sacrum, even there its office is an important one, for its gentle pressure upon the relaxed os, and upon any bleeding vessels that may exist, is most salutary. Of course, in the case of a strong, healthy woman, in a perfectly natural labor, it may make no material difference how much the placenta is hurried in its exit; but the majority of those to whom we minister are not of this class. The one point which I wish to emphasize is this; that the placenta is the best and *only* tampon suited to the post-parturient condition; that after its complete separation before it leaves the uterus, or before it leaves the vagina, it possesses all the qualities of an unirritating, smooth, soft, and yet sufficiently firm barrier to the effusion of blood.

Extract it before the time, and you have lost an advantage which you cannot regain.

I do not advocate leaving the afterbirth entirely to the unaided efforts of nature; that course has been tried by careful observers and abandoned. It is no part of my present purpose to discuss the general management of the placenta. I make no reference to complications and special emergencies. The case is natural—is ordinary; don't take the risk of making it unnatural—extraordinary—by pulling at the afterbirth before the nervous system of the newly-made mother has had time to rally its forces. Whether the time required for this be half an hour, an hour, or two hours must be left to the individual judgment of the accoucheur. As a rule, do not be in a hurry.

Chloroform in the Cold Stage of Pernicious or Congestive Malarial Fever.

Chloroform has been used to some extent in these cases for a great number of years, but we believe that it has by no means received the attention from the profession in general that it deserves. The following report of a case by Dr. Wm. W. Murray, of Baltimore, Md., published in the July number of the *Medical Summary*, fully proves its value in these cases:—

March 20th, was called to see Lilly H., aged six years; found her suffering with well-marked chill, the usual amount of congestion present. Warmth to surface was the only direction given, there being no necessity for active interference.

Was sent for hurriedly in half an hour and informed the child was dying. When I reached the bedside, within a few moments from the summons, found that overwhelming congestion had suddenly developed; the lips were livid; entire skin surface mottled, icy cold, and bathed in clammy perspiration; heart's action slow and labored, pulse scarcely perceptible; respiration being very imperfectly performed; lower jaw drooping, and eyeballs turned up; pupils irresponsive. Her condition could not be more alarming. I perceived at once that the congestion must be relieved, and that very soon, or the child would die.

I immediately dropped about ʒss. Squibb's

chloroform on a little pulverized gum acacia, and made the child swallow it. No sooner had it reached the stomach, it seemed, than reaction set in, the superficial capillaries dilated, the skin began to get warm, the lividity of skin and lips disappeared, the heart and lungs became disengaged, the pulse and respiration improved, the eyes resumed their natural beauty; in short, the congestion was relieved, and life restored, where, but a moment before death was imminent. The rapidity with which all dangerous symptoms were dispelled can be realized only by those who have witnessed such a case. Under liberal doses of quinia the child was soon restored to health.

Chloroform, given either by inhalation or by the stomach, will *always* relieve these cases, as is well known in our Southern country, where the congestive chill so frequently manifests itself, and not only so, but, as the greater includes the less, it will *always* relieve the congestion of an ordinary child; the reaction (fever) being less or greater, according as the congestion is dispelled at first, or after it has become well marked.

The Cure of Varicose Veins by Subcutaneous Ligature.

Dr. John Duncan, of Edinburgh, employs carbolized catgut for the radical cure of varicocele. (*Brit. Med. Jour.*) The veins are separated from the artery and vas deferens, and a needle armed with catgut is thrust through at the point of separation, it is then reintroduced at the orifice of emergence, made to pass between the veins and the skin, and brought out at the original entrance; the two ends are then firmly knotted together and cut short; by traction on the scrotum the knot is made to disappear entirely, and the punctures are covered with salicylic wool saturated with collodion. The same manœuvre is repeated an inch higher, and sometimes a third ligature is advisable. A hard lump of coagulum forms between the ligatures, tender at first, but soon diminishing in size, and becoming insensible. Dr. Duncan treats varicose veins of the leg in the same manner, the introduction of the point of the needle into the aperture of exit of the first puncture and the tightening of the loop of catgut is difficult when there is brawny œdema; in such cases the patient should be kept at rest, and an India-rubber bandage applied for a few days. A single ligature is not sufficient, and to close the lumen permanently, two must be applied about one inch apart. It is essential that no branch be given off in the segment of vein between the ligatures.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Numbers 7, 8 and 9 of "Photographic Illustrations of Cutaneous Syphilis," by George Henry Fox, A.M., M.D., Clinical Lecturer on Diseases of the Skin. College of Physicians and Surgeons, New York, are before us. Each number contains four plates, taken from life and colored by hand. They certainly look life-like, and, as they are accompanied by a descriptive text, they must be regarded as excellent substitutes for clinical study. They are published by E. B. Treat, No. 757 Broadway, New York, and cost $2.00 per number. Twelve numbers, containing forty-eight plates, constitute a complete volume.

——We have just received Part IX of "Atlas of Skin Diseases," by Louis A. Duhring M.D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania. This part concludes the present series, which contains in all thirty-six plates. These are all faithful copies from life, of highly artistic finish, and they are accompanied by a brief history of each case. Many physicians in this country have had but few opportunities to attend clinics, or even listen to didactic lectures on dermatology, and to such this atlas will prove of inestimable value. It is published by J. B. Lippincott & Co., of this city, at $2.50 each part.

——"Hip joint Disease: Death in early Stage, from Tubercular Meningitis," is the subject treated of by Dr. De Forest Willard, accompanied with microscopical appearances, with cuts by Dr. E. O. Shakspeare, in a reprint from the Boston *Medical and Surgical Journal.*

BOOK NOTICES.

Anatomical Studies upon Brains of Criminals; a Contribution to Anthropology, Medicine, Jurisprudence, and Psychology. By Moritz Benedikt, Professor at Vienna. Translated from the German by E. P. Fowler, M.D., of New York, Department of Translation, New York Medico-Chirurgical Society. New York: Wm. Wood & Co., Publishers, 27 Great Jones St. 1881. Cloth, 8vo, pp. 185.

It is quite refreshing in these days of rapid book making, when men must become authors, whether they have anything new to tell the world or not, and when, consequently, one-half of the books that are published are simply repetitions and compilations, to receive a work stamped with the freshness of original research. To that class belongs the work before us, and we sincerely hope, with the author, that his investigations, which were pursued amidst numerous difficulties, may prove foundation stones toward a natural history of crime, and that the work he has begun may be taken up and perfected by others, until its effects on society shall be felt through improved methods of dealing with criminal classes. The

author first invites attention to the normal type of brain, with separated fissures, and then to the confluent fissure type, which he regards as abnormal. The relation of the cerebellum to the cerebrum he also considers of great importance, the cerebellum being, in the higher types, completely covered by the cerebrum. Between these two types there exist, however, manifold transitions. He then gives the result of his observations of the brains of twenty-two criminals. In all of these the cerebellum was imperfectly or asymetrically covered, and the fissures were more or less confluent. This cannot be accounted for on the supposition of peculiarity of race type, as the brains examined belonged to the most diverse races and types. The author, therefore, comes to the conclusion that "the brains of criminals exhibit a deviation from the normal type, and criminals are to be viewed as an anthropological variety of their species, at least among the cultured races." As this proposition is calculated to create a veritable revolution in ethics, psychology, jurisprudence and criminalistics, he recommends that it be handled with the greatest prudence; that it should not yet serve as a premise, and that for the present it ought not to leave the hands of expert anatomists. He finally draws attention to the similarities which exist in the human brain, and that of other mammalia, as the ape, the fox and the bear. The translator has rendered great service to science by placing this work within reach of the American profession, and it is to be hoped that it will incite a more widespread interest in comparative craniology, until these questions will be finally settled by science. Surely there is no want of material.

On the Value of Phosphorus as a Remedy for Loss of Nerve Power and Functional Disorders of the Nervous System, induced by Overwork and the Exigencies of Modern Life. With Formulæ and Directions for Treatment. By Edmund A. Kirby, M.D., Member of the Royal College of Surgeons, England. Fifth Edition. Philadelphia: Presley Blakiston, 1881. Paper. 8vo, pp. 105. Price $1.00.

The author informs us in his introduction that although phosphorus has been largely used as a nervine tonic and renovator of nerve tissue, both in America and on the Continent of Europe, its employment in England was wholly neglected until 1871, when some remarks on its value as a medicine and the means by which it could be safely administered, were published in the first edition of this work. This led to its introduction into the British Pharmacopœia in 1874, but the officinal preparations the author regards as unsuitable. He enters fully into the therapeutics of this drug, but we fail to see anything original in what he says. Several cases are recorded, and in most of these (as might be expected) the administration of phosphorus was attended with success. The originality of the work consists in the general condemnation of most of the preparations in general use, such as the phosphorated oils, ethers, tinctures, the phosphites, hypophosphites and the phosphide of zinc. The only preparation which the author recommends is the pil. phosphoric mollis (the mollis is to distinguish it from the worthless preparation of the Pharmacopœia), prepared under the direct supervision of the author in his son's laboratory. The process of preparing this is not revealed, as—so the author says—it would be dangerous to undertake it without experience. Numerous formulæ are, however, given for incorporating with this pill-mass other drugs, as iron, quinine, strychnine, etc. From what we have here said the object of this work is plain.

Fifth Annual Report of the State Board of Health of Wisconsin, for 1880. Madison, Wis.: David Atwood, State Printer. pp. 202.

Besides the General report of the Board, and the Secretary's report, this volume contains the following valuable papers on hygienic subjects: "General Hygienic Knowledge a Necessity for the People," by Dr. H. P. Strong; "Recreation as a Sanitary Agent," by Rev. J. W. Hageman; "School Hygiene, and what the Teacher can do to Promote It," by Prof. T. W. Chittenden; "The Management of Contagious Diseases in the City of Milwaukee," by Dr. O. W. Wight; "Diseased Meat," by Dr. H. P. Wurzel; and "Kerosene," by Dr. J. T. Reeve, the Secretary of the Board. These, as well as numerous extracts from special correspondence, show that physicians in all parts of the State are wide awake to the causes of disease, and ready to aid in their prevention.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army; Authors and Subjects. Vol. ii. Berlioz—Cholas, Washington: Government Printing Office. Cloth, 4to, pp. 990.

This volume includes 12,459 author-titles, representing 4934 volumes and 9810 pamphlets. It also includes 11,550 subject-titles of separate books and pamphlets, and 37,310 titles of articles in periodicals. The volume is quite elegant in appearance, and the catalogue will, by the time it is finished, form quite a library by itself.

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THE MALARIAL INFLUENCES IN WASHINGTON.

At the last meeting of the French Association for the advancement of Science, an eminent Parisian surgeon read a paper on the surgical complications of malaria. It has been gravely feared that these would be exemplified in the case of President Garfield. It is notorious that the White House is situated so near the low, marshy ground along the Potomac that the paludal poison has free entrance to its rooms, and several of his attendants were taken down by malarial symptoms.

Indeed, the miasmatic influences around Washington are unmistakable, and their sources are obvious enough. When the city was first laid out there was a good deal of low, marshy ground in the section of the city west of Capitol Hill, but this has now to a great extent been filled up, and since the Tiber creek has been overarched, about the only serious drawback to the salubrity of the place has been the Potomac flats; and these are, and, unless something is done to remove or to improve them, always will be, pestilence-breeders.

The Potomac river, which is scarcely a quarter of a mile wide at Georgetown, takes a short southerly bend where Rock Creek—which divides Washington from Georgetown—flows into it, and rapidly broadens, until, at the Long Bridge, which is due south of the White House, it is a mile wide. Immediately south of the White House is a public park, then comes the mouth of the Tiber creek, then another park, upon which stands the unfinished Washington monument, and then the river and the mud flats. There is, consequently, nothing to prevent the poisonous exhalations from the river from reaching the Executive Mansion, and they do reach it, to such an extent that, for a number of years past, it has been the custom of our Presidents and their families to abandon it as a residence during the summer season and go to the Soldiers' Home. These flats, if not caused by the Long Bridge, have been greatly aggravated by that structure, for the so-called Long Bridge is not a bridge at all for a considerable portion of its length, but a causeway, against which the mud and debris of the river has been piling up for many years. One of the ideas that prompted the construction of this causeway was that it would promote the scouring out of a good channel, and thus facilitate the growth of commercial enterprises at the nation's capital. The results in that direction, however, have not answered the expectations of the engineers who built the Long Bridge, while a deleterious result, which they evidently did not anticipate, has been achieved.

These facts have been known to all residents of the city, and also the other fact, that malarial diseases have been on the increase. Nevertheless, nothing has been done to remove this discreditable condition of things.

But the Government has certain responsibilities with regard to the capital of the nation which cannot with propriety be ignored, and which ought to be fulfilled no matter what the cost may be; and one of these is the maintenance of sound sanitary conditions. There is no

sufficient reason whatever for believing that the case of the Potomac flats is a hopeless one; and yet, so long as they remain as they now are, it looks like foolishness for the Government to keep on erecting costly buildings, and making conditions which involve individual citizens in heavy expenses. At the same time, the case is very apt to take on a somewhat hopeless look whenever the engineers begin to commence operations—for operations with regard to this mudbank have never reached beyond the point where somebody was just going to begin the extreme preliminaries.

Objections are at once made by some of the innumerable "rings" that this plan and that plan will not answer, and no plan will answer but one which will put plenty of money into their own pockets.

It is high time that the whole affair be taken from politicians, ringsters and committees, and that competent sanitary engineers, under the supervision of the National Board of Health, carry on the work in the proper manner.

AN UNTIMELY DISPUTE.

The President's case has led to a discussion on ethics, which has an interest outside of the relations of those immediately engaged in it. It appears that Dr. Baxter, U.S.A., had been for years President Garfield's personal physician, but at the time of the accident was away from Washington, and did not get back until July 3d, when the following conversation took place between him and Dr. Bliss, who had assumed charge of the case. The report of the conversation is made by Dr. Baxter, and published in Walsh's *Retrospect*.

"*Dr. Baxter.* 'Doctor, I have come to ask you to take me in to see the President.'

"*Dr. Bliss.* 'Well, I don't see the necessity of your seeing the President; I wish to keep him quiet.'

"*Dr. Baxter.* 'I make the request as the President's physician. I have for years been his physician.'

"*Dr. Bliss.* 'Yes; I know your game; you wish to sneak up here and take this case out of my hands.'

"*Dr. Baxter.* 'I wish nothing, Dr. Bliss, except what I am entitled to. If the President prefers that you should take charge of his case, I haven't a word to say.'

"*Dr. Bliss.* 'Well,' 'you just try it on. I tell you that you can't do it. I know how you are sneaking around to prescribe for those who have influence and will lobby for you.'

"*Dr. Baxter.* 'That is a lie!'"

Of course, after the conversation had reached this point, the only parliamentary course was for the participants to take up their hats and leave. This Dr. Baxter did, and his connection with the case ceased.

Assuming that the published report of the occurrences and expressions are correct—and no contradiction of them has appeared, so far as we know—the medical press ought hardly to pass in silence such a public instance of unbecoming language and unethical conduct.

It becomes especially the duty of physicians who, by their high professional attainments or by a chance of circumstances, are brought prominently before the public, to exercise unusual care in their language and demeanor toward each other. Personal considerations should be subordinated to a respect for those rules which have been clearly established as the most just in governing professional relations. To neglect this is to belittle themselves and the profession they represent.

There are cases where a physician or surgeon thinks himself so eminent as to be emancipated from the restrictions of the professional code. It is proof of a small mind and a weak head for any man to fancy himself above the claims of courtesy and the laws of good breeding; on the contrary, he is bound the more to respect them.

The unworthy and undignified position which the medical profession holds, compared with that it could rightfully claim, is largely attributable to such conduct as is above set forth. It is a matter for satire and a subject of comedy, how physicians quarrel over a patient. How unfortunate that this most public case gives occasion to repeat the sneers of Montaigne, Moliere and Hogarth! That this conversation has passed into History, and has been so much commented upon in the daily press, are the only reasons why we have unwillingly referred to it.

Notes and Comments.

The Cure of Dipsomania.

The eminent hygienist, Dr. Alfred Carpenter, is confident that even hereditary dipsomania is a curable disease. He said, in a recent address, its cure depended upon two conditions, the personal habits of the patient himself, and his hereditary tendencies. In the case of those where the habit was acquired, the cure would be comparatively rapid, and provided means were taken to instill proper principles as to the knowledge of the chemical ac ion of alcohol, there ought to be no relapse when the patient came out of the home where he ought to be attended; but in hereditary cases the result might be very different. It took a lifetime to change these conditions, and yet they knew that practice would be made perfect, and that the hereditarily nervous man might, by proper education, get rid of his nervousness. There was the work of the home to inculcate such maxims, and bring the patient along a course of self-control, under proper teaching, as might eliminate even hereditary tendencies, and restore the man to his original purity and mental power. He believed they could do this. To doubt it was to doubt the power of their noble profession in its first lines of work, and to lose sight of the fact that the work of the medical profession was more often hygienic and educational than one connected with the mere administration of drugs, and providing antidotes of diseases.

Hernia of the Stomach and Transverse Colon Through a Perforation of the Diaphragm.

M. Chas. Nélaton mentions, in his thesis (Thése de Paris) an interesting observation which has just been completed by the autopsy of the individual in the service of M. Empis (Societé Anatomique, December, 1880).

An individual shot himself in the sixth intercostal space on the left side, somewhat above and to the outside of the nipple. On examination, complete dullness on percussion was found from the spine of the scapula down, with complete disappearance of the respiratory murmur and thoracic vibrations. Diagnosis: penetrating wound of the lung; hæmothorax.

There was considerable fever up to January 14th, when everything appeared favorable, although the pleura was filled with liquid. On January 31st fever reappeared and continued up to February 8th, when the expectoration of a great quantity of liquid demonstrated that the effusion was being removed through an opening into the bronchial tubes.

From this time there was marked improvement, and the patient was discharged, apparently well, on April 12th.

On the 6th of December of the same year, the patient entered the service of M. Empis, with incoercible vomiting, complete anorexia and great thirst; the matters vomited consisted exclusively of the liquids and other food ingested. The vomiting proved completely uncontrollable, enemata of milk were retained at first, but this means soon failed and the patient succumbed on December 17th.

At the autopsy it was found that the ball had taken a downward direction, passing through the lower lobe of the left lung and the diaphragm, lodging in the superior aspect of the spleen, just underneath the capsule. The absorption or rather expectoration of the blood at first effused, left a space between the diaphragm and the retracted left lung, which was found filled up with the stomach and a part of the transverse colon, which had passed through an opening about three centimetres in diameter, left in the diaphragm by the passage of the ball. The smaller curvature of the stomach adhered, at several points, to the diaphragm, which would seem to show that the hernia of the stomach took place not at the period the patient had commenced to vomit (Dec. 6th), but much earlier, at the time when the blood effused in the pleural cavity had been expelled through the opening into the bronchial tubes.

This case is remarkable through the recovery after a lesion involving the pleural and peritoneal serous membranes and two such important viscera as the lung and spleen.

Cysto-Urethritis Caused by Internal Hemorrhoids and Pin Worms.

Dr. S. F. Carpenter, of St. Joseph, Mo., gives in the *Kansas Medical Index* for July, 1881, the history of a case of cysto urethritis of three years' standing, in a female, who during the entire period had been under constant treatment at the hands of different physicians. For about five years she had also suffered alternately with internal hemorrhoids and pin-worms. Being fully satisfied that the cystic inflammation was the result of the constant rectal irritation, the doctor determined to direct his attention first to that organ. After having his diagnosis confirmed by ocular inspection, she was given an aloe cathartic, followed with a full dose of castor oil and tur-

pentine, which cleared out the bowels and removed a large number of worms; this was followed with injections of carbolic acid and spts. turpentine, three drops of each in three ounces of soft water. The injections were used once a day for ten days: in the meantime another cathartic was given. This treatment destroyed and removed every worm in the bowels, and also relieved to a great extent the hemorrhoidal affections. During this treatment the patient suffered little or no spasmodic contraction of the bladder, and did not have to urinate one-half as often as she did before. At the end of this treatment, which lasted ten or twelve days, the patient was placed under treatment for the cystic affection, which consisted in first touching the follicles of the meatus and urethra with nitrate of silver, and injecting the bladder and urethra with a solution of bi-carbonate of soda and carbolic acid, 5 drops of carbolic acid and 10 grains of bi carbonate of soda to the ounce of soft water. The internal treatment consisted of alterative and diuretic remedies, as follows: Bi-tartrate of potassa, acetate potassa, buchu and sulphate of morphine as a diuretic and anodyne; and iodide and bromide of potassium as an alterative. Under this local and constitutional treatment, the patient made a perfect recovery in two months from the beginning, and at the present writing there is no sign whatever of a return of the disease. The patient had also suffered for three years constantly with a sick stomach, which has subsided entirely since the cure of the rectal and cystic affections. That affection was purely sympathetic.

The patient is now enjoying perfect health, and is more than grateful for her recovery.

Antipyretic Action of Alcohol.

In a recent thesis on this subject, by M. Dumonly, *Thèse de Paris*, 1880, the author arrives at the following conclusions:—

1st. Very large doses produce a considerable reduction of temperature. 2d. Feeble doses, about half an ounce and more, produce slight lowering of the temperature; this is temporary, and not influenced by the digestion. 3d. Very small doses, two drachms, or more, induce a slight rise in the temperature of about two or three-tenths of a degree.

The author also studies alcohol from a therapeutic point of view, and particularly as regards its effect in fevers:—

"Alcohol, he says, has a stimulant action in febrile conditions of the system. 1st. It is a powerful remedy against delirium and adynamia. 2d. It does not act as an antipyretic agent; it does not favorably modify the temperature. 3d. Large doses (of thirty grams) of pure alcohol induce a slight fall in the temperature (of a few tenths of a degree). This hypothermic effect does not last long; it is at its maximum after an hour and a half, and has completely passed away in three hours. 4th. Small doses, frequently repeated, do not induce this temporary reduction of temperature. 5th. Large doses or small doses frequently repeated have a feeble effect on the pulse. 6th. Large doses do not cause intoxication in the febrile patient, as they would if he was in perfect health."

In short, according to this author, though alcohol may have some action in fevers, it has not the antipyretic action with which it has always been credited.

Anthracosis.

M. Proust, at a recent meeting of the Academie de Medécine, read a report on a memoir by M. Riembault. Anthracosis is a disease observed in coal-miners; coal dust is formed of extremely fine particles, which are rounded, and do not irritate the tissues with which they come in contact. Consequently the dust is inhaled and tolerated without notable inconvenience, until it becomes accumulated in sufficient quantity to trouble the respiratory function and determine catarrh and emphysema. Finally, and after a considerable period the physical signs of cavities in the lung are found, and at the same time the patient having lost health and strength dies in a state of marasmus.

It is by no means tuberculous phthisis, for no tubercles are found at the periphery of the particles of carbon; certain portions of the lungs are so loaded with these small particles that they finally break down, and give rise to the excavations and consequent marasmus.

A Sensible Remedy for Sea-Sickness.

A correspondent to the *Scientific American*, says that his first sensation on reaching the ocean was that of being in a very high swing. The same sensation of nausea immediately exhibited itself. It struck him at once that probably the same means adopted to overcome the sickness in the swing would prove effective on the sea—that was, to force the swinging. He therefore watched the motion of the steamer, and as she was about to descend, he made an effort as though to force her down. Continuing this for a short time the

feeling of nausea disappeared, and he had no recurrence of it during either voyage, separated by several months' duration.

This probably explains why boys who first go to sea (as apprentices) never remain sick long. They are made to work, sick or well, sometimes being kept on deck extra as a punishment for being sick. They naturally and instinctively follow the motion of the ship in order to keep on their legs, and as a result the unpleasant sensation soon vanishes.

A Folk Medicine for Chronic Cough.

A remedy, says Dr. Landerer, in the *Chemist and Druggist*, which in many cases has produced remarkable results, is the root of *Urtica pilulifera*, the Roman nettle, called *Knïai* by the old Hellenes and *Tsuknida* to-day. The name *Pilulifera* was suggested by the pill-like clusters of fruit. The name *Urtica* is derived from the verb *urere*, to burn, and is as applicable to the plant as its other name, *Serpentes vegetabiles*, vegetable snakes. The seeds of this *Urtica* are collected and sold at a high price (5f. to 6f. an okka), and a decoction of them is an approved medicine for increasing the secretion of milk in nursing mothers.

Transformation of Morphia into Codeia.

Mr. Grimeaux (*Comptes Rendus*) has proved the possibility of this conversion. His theory is that morphia ($C_{17}H_{19}NO_3$) is analogous to the phenols, and that codeia ($C_{18}H_{21}NO_3$) would be the methylic ether of morphia regarded as phenol. He, therefore, dissolved one molecule of morphia in alcohol containing in solution one molecule of soda, and added one molecule of iodide of methyl. The codeia resulting from the reaction when purified presents all the characters of codeia obtained direct from opium, in regard to chemical properties, crystalline form and rotatory power.

Special Reports.

NO. XV.—DERMATOLOGY.

The activity in the domain of dermatology indicates the ardor with which this specialty is pursued. Our report upon it will be largely of a practical nature, but not wholly neglecting some of the most interesting pathological studies.

The Clinical Varieties of Acne

Dr. Walter Smith, Vice President of the College of Physicians of Ireland, recently read a paper before that body in which he states that, from a practical point of view, cases of acne fell into three groups: 1. Those in which retention of sebum (comedo) was a prominent feature; 2. Those in which an inflammatory process predominated; 3. Those in which vascular congestion required to be specially dealt with.

Dr. Smith took for illustration, as a common type of case, one presenting a number of pimples, some finely papular, some indolently tubercular, and others suppurating at the apex. If there were much pus, the first step would be to gently but freely open, with a small but very sharp knife, the little abscess of acne. Any troublesome bleeding was readily checked by stuffing the cavity with a pellet of absorbent cotton. With the sluggish, copper-colored tubercles, the object was to promote absorption of the products of inflammation, and to stimulate to healthy action, without producing a caustic effect, lest scarring should result. For this purpose, the author used to employ the acid nitrate of mercury, but he had abandoned it in favor of carbolic acid. This agent was an excellent stimulant and pus-destroyer, without being powerfully caustic. It tended to numb the part to which it was applied, in virtue of its local anæsthetic quality, and hence it caused less pain than the mercurial salts, and, when carefully used, it frequently effected rapid absorption of the unsightly acne pimples without leaving a permanent mark. Dr. Smith usually applied it by means of a glass rod or stick with rounded point dropped into the liquefied acid, and had beside him a piece of blotting paper to sop up any accidental excess of the acid that might fall on the skin. It was important not to overdo it; and immediately after the application it was advisable to cover each carbolized spot with a film of flexible collodion. This not only protected from atmospheric irritation, but also formed a colloid compound with the carbolic acid, and so minimized its irritant action. The patient was directed not to wash off or forcibly remove this varnish (which scarcely showed on the face), and to apply a suitable lotion or ointment twice or thrice a day. The number of repetitions of the carbolic application depended upon the nature of the case; but, even in aggravated cases, two or three applications would sometimes suffice to remove the most disfiguring portion of the disease. To expedite the cure, it was often serviceable to dust the face at night with precipitated sulphur, by means of a puff, washing it off in the morning with the lotion. If the skin was irritable or inflamed, nothing proved so soothing to the skin and grateful to the patient as washing the face with rice-milk, prepared by boiling a teaspoonful of ground rice in half a pint of new milk.

Acne and Comedones.

A late number of Schmidt's *Jahrbuch* gives some of the later methods of treating these affections of the sebaceous glands. In the treatment of comedones Unna first applies this ointment:—

R.	Boli albi,	4	parts
	Aceti,	2	"
	Glycerinæ,	3	" M.

After applying this thoroughly for a few days the comedones can be readily pressed out.

Sessman, after pressing out all visible comedones, and opening pustules with the raspatory or lancet, rubs the part with soap and immediately covers it with rags smeared with salve:—

℞.	Cetacei,	1 part
	Adipis,	2 "

In the evening he dresses the acne points with Zeissl's sulphur paste, to wit:—

℞.	Lac. sulphuris,	
	Potass. carbon.,	
	Glycerinæ,	
	Alcoholis,	equal parts.

This is washed off in the morning. Should inflammatory action set up again, he returns to the salve. For a long time after the skin is smooth, it should be washed with soap morning and evening.

In an obstinate case MacDonnel effected a cure in a few weeks by *chrysarobin* applied in a salve, one part to thirty, of which it was applied at first twice daily, later once a day.

Acne Punctata.

To get rid of the sebaceous plugs, M. Hillairet recommends, in the *Progrès Médical*, a solution of borax, as:—

℞.	Sodii boratis,	℈ j	
	Etheris sulphurici,	ʒ j	
	Aquæ,	ʒ j	M.

The parts should be washed every morning with very warm water, containing a little ammonia, to stimulate the skin.

When the functions of the glands have thus been regulated, he modifies the secretions by the employment of astringent lotions, as of tannin, alum, peroxide or perchloride of iron, etc.

Inflammatory Acne.

The following treatment of inflammatory acne is that recommended by Dr. W. Smith, in the Dublin *Jour. of Med. Science*, May, 1881:—

If there be much pus formation, the first step should be to gently but freely open the little abscesses. To stimulate the sluggish copper-colored tubercles, so as to promote their absorption, the best agent is carbolic acid; a little of the pure acid should be applied, and the spot at once covered with a layer of flexible collodion. The face may be dusted at night with precipitated sulphur, and washed with a suitable lotion in the morning; if the skin be very irritable, wash with rice milk, prepared by boiling a teaspoonful of ground rice in half a pint of milk. On the dorsal region more energetic treatment is necessary; diligent friction should be practiced with soft soap. As a soothing lotion the following is useful:—

℞.	Zinci oxidi,	ʒ ij	
	Glycerini boracis,	ʒ j	
	Spt. cajup.,	ʒ iss	
	Lin. calcis,	ʒ v.	M.

As a stimulant application:—

℞.	Sulph. præcip.,	gr. xx	
	Hydrarg. ammon.,	ʒ ss	
	Vaselini,	ʒ iv	
	Ol. amygd. amar.,	♏ iij.	M.

Or—

℞.	Glycerini acid. carbol.,	ʒ ij	
	Sulph. præcip.,	ʒ ss	
	Sap. mollis.		
	Spt. vin. rect., āā	ʒ j	
	Ol. amygd. amar.,	♏ iij.	M.

Pathology of Alopecia Areata.

Some marked cases of this affection are narrated by Dr. J. Collier, in the *Lancet*, June 11th, 1881, and at the close he makes some remarks on the pathology of the disease:—

Alopecia areata may be regarded as a cutaneous neurosis. Most dermatologists are agreed that it is originated by a lesion of nerve function which takes the form of a disturbance of nutrition, of the formation and reproduction, of hair. Several considerations appear to support this view; thus we often have tingling pain before the baldness appears, and afterward marked loss of sensation in the patch. Under the microscope the diseased hairs will be seen to be simply atrophied and of a lighter tint than the natural hair. Several cases have also been recorded by Mr. Erasmus Wilson, in which this affection was caused by severe neuralgia. In such cases a paralytic condition of the trophic fibres of the sympathetic is produced; the exhausted nerve yields up its power, to a greater or less extent, and refuses to perform its function.

Eczema.

In this very common disease Mr. W. Cottle, of the Hospital for Diseases of the Skin, Blackfriars, London, has obtained particularly good results from *chaulmoogra oil*, and its active principle *gynocardic acid*. He writes to the *British Medical Journal*, June 25th, 1881:—

In persons with delicate skins, the portions of the cutaneous surface that are uncovered, or exposed to the action of accidental irritants, as the face, the hands, and the arms, are peculiarly liable to attacks of painful and most troublesome eczema. In these situations, often from the difficulty of removing the exciting cause, such an inflammation is frequently most rebellious under treatment, and very apt to recur. When eczema affects the face, it is sometimes acute, and generally intolerant of local applications. In such cases as these, and in the more chronic form, when it shows itself as patches of dry eczema, I have found an ointment of gynocardic acid of from fifteen to twenty-five grains to the ounce of vaseline almost a specific, when most of the ordinary applications in use only served to aggravate the local mischief. The ointment should be applied three or four times daily, so as to keep

the affected parts lubricated with it. Again, in eczema of the hands, such an ointment is the most generally useful application with which I am acquainted. I have seen many most obstinate examples of this disease affecting the hands, which had in no way improved under treatment by the ordinary measures, rapidly heal under the application of gynocardic acid ointment. The ointment should be used of about the above mentioned strength, and should be applied four or five times daily; or, if the patient can bear the inconvenience, the ointment should be spread on a soft rag and laid over the affected part, and may be kept in position by wearing gloves, or by a few turns of bandage. Very useful and soothing also, are both chaulmoogra oil and gynocardic acid when applied in this way in eczema of any part of the body; but it is in cases where this disease attacks the face and hands that I have found them so preëminently beneficial. I have met with no ill effects consequent on their use, nor do they exert any action on the sound skin. The employment of such local measures in no way interferes with nor removes the necessity of the assistance of the internal remedies adapted to each case. In the acute form of this disease, or where there is much discharge, the good effects following the use of chaulmoogra oil or gynocardic acid locally applied are not so marked.

For that troublesome affection, *Eczema of the Anus*, Dr. L. Duncan Bulkley gives some practical hints in the *Med. Record*.

The first indication is to relieve the constipation which almost constantly accompanies eczema of the anus. When there is congestion of the hemorrhoidal vessels Dr. Bulkley orders precipitated sulphur and bitartrate of potash in equal quantities, and directs that from one to two teaspoonfuls be taken at night on retiring, rubbed up with water into a paste. Next to imperfect bowel secretion is deficient kidney action, and he finds the best results from the use of—

℞. Potass. acetatis, ℥ j
Tinct. nucis vom., ℥ ij
Infus. quass., ℥ iv. M.

Sig.—A teaspoonful after meals, in water.

For the relief of the intolerable itching, the patient is recommended to sit on the edge of a chair, and have a basin full of water so hot that the hand cannot wholly be thrust into it. A soft handkerchief is then squeezed out of the water and held in a mass against the anus and genital parts, for as long a time as it can be borne; it is then to be dipped in the water again, and the process repeated three times, the whole not lasting more than two or three minutes, since too long bathing or too frequent sopping of the parts makes matters worse. The parts are then to be rapidly dried by pressing a large, soft linen napkin upon them, with absolutely no friction; after which they should be wrapped in lint smeared with an ointment, which must vary for each case, but which most usually takes the following form:

℞. Ungt. picis, ℥ j
Zinci oxidi, ℥ ij
Ungt. aq. ros. (U.S.P.), ℥ iij. M.

Lotions are also of service.

In the moist eczema frequent in children, and in eczema of the nipple in suckling women, Dr. Von Yenser (*Centralblatt für Kinderheilkunde*), has had good results from salicylic acid. His formula is as follows:—

℞. Acidi salicylici, 1 part
Alcoholis, q.s. to dissolve;
then add:—
Unguent. petrolei, 25 parts. M.

Eczema Palmare.

Eczema of the palm is more common in children than adults, except from a syphilitic origin.

Dr. Finny, in the Dublin *Medical Journal*, January, 1881, recommends, in non-syphilitic cases, the constant use of india-rubber gloves, followed up by an ointment of ammoniated mercury, twenty grains to the ounce. The oleate of zinc diluted with unguentum petrolei answers best in moderately chronic cases where the thickening is not extreme. Where treatment threatens to be tedious, owing to the extreme density of the tissues, or when constant applications of ointments or india-rubber gloves are impracticable, a more rapid solution of the thickened epidermis is necessary prior to using curative ointments. The best solvent is potash, which may be employed as a lotion, applied on lint under gutta-percha, in the strength of two to four drachms of liquor potassæ in eight ounces of water. Care must be taken not to overreach the object in view. During any treatment the hand should be kept flexed, to avoid tearing open the fissures which are in process of healing.

Erythema Nodosum.

In the *Deutsches Archiv für Klin. Med.*, July, 1881, Dr. A. Strumpell, of Leipzig, has an article on this affection. He does not believe it a "vasomotor" affection, but the local expression of a general disease. It is recurrent, associated with high fever and severe pain, and often with visceral complications. It is closely related with inflammatory articular rheumatism, with which its outbreaks are often associated. With moist erythema it has nothing to do.

In regard to treatment, he believes that full doses of salicylic acid are the best means of cutting short the attacks, or at any rate of mitigating their severity. He gives the history of a case with a chart of temperature illustrating the active febrile phenomena present.

Fetid and Excessive Sweating.

Last September Dr. G. Thin described a method of treatment (*Brit. Med. Jour.*) for fetid

sweating of the feet, which he asserted is simple and effective. The stockings are changed twice daily, and the stocking feet placed for some hours in a jar containing a saturated solution of boracic acid; they are then dried, and are again fit for wear. The acid destroys the smell. Cork soles must also be used, as the leather in the bottom of the boots also smells badly; half a dozen pairs should be kept in use, each pair used only a day at a time, and treated also with boracic acid.

Dr. WILCOX, in the same periodical, stated his preference for soap or lead plaster, or that recommended by Hebra.

Dr. BULL, in a most obstinate case of fetid sweating in the axilla, in which Hebra's diachylon ointment had been fully tried and failed, secured decided improvement by the application of a ten per cent. ointment of *oleate of mercury* (*ibid*).

There is no doubt that Hebra's ointment often fails through faultiness in its manufacture. This is commented on by Prof. DUHRING, in the *Med. Times*, May 7. After observing on the little success that has attended the attempts to prepare this ointment in a satisfactory manner, he states that a pharmacist of Philadelphia has succeeded in preparing it of a uniformly superior quality after long experimenting—the ointment prepared from Hebra's directions not having answered expectations. The following formula furnishes an ointment containing a definite amount of oxide of lead, which, with the use of litharge, cannot be estimated:—

One part of freshly precipitated (from acetate of lead) pure white hydro-oxide of lead is rubbed into two parts of water, and mixed well with six parts of the best Lucca olive oil. It should be stirred for about two hours over a hot water bath, near to boiling-point, and cooled with constant stirring until the proper consistence is obtained. While cooling, a drachm of oil of lavender to the half pound of ointment is added.

This ointment contains the oleo-stearate of lead, has a neutral reaction, and can be kept in good condition for some time. It is a smooth, whitish, elegant preparation, and is altogether more desirable than that made from any other formula.

Dr. ARMAINGAUD (*Paris Médical*, March 10, 1881) advises *nitrate of pilocarpin*, used hypodermically, for fetid perspiration. He explains its action as derivative and substitutive by stimulating the salivary glands.

The cause of the unpleasant odor is differently understood. Dr. THIN, in the article above referred to, attributes it to *bacteria* in the discharge from the sudiparous glands. M. C. ROBIN, having shown that the sweat contains *leucin*, explains the odor as that of valerianate of ammonia, produced by the decomposition of this substance.

Favus, Tinea.

In the treatment of ringworm of the scalp Dr. H. S. PURDON declares (*Archives of Dermatology*, July, 1881) that he has lost faith in epilation, and prefers continuous suppuration. He recites one case, as follows:—

I first had all crusts on the head of the case under consideration removed by a linseed-meal poultice, the hair cut short, and then for two or three days applied plain zinc ointment. Afterward I daily brushed a certain portion of the scalp with the *linimentum crotonis* of the British Pharmacopœia.

This treatment was continued for eight weeks. Internally the boy took a mixture containing Fowler's solution and iron, so as to "change the soil" on which the vegetable growth flourished. But in this I have little faith. After discontinuing the croton oil his head was rubbed daily with paraffine oil, which seems not only to act as a good parasiticide, but also, as is well known, promotes the growth of hair. He is now (September 1st), to all intents, quite well: there is no redness, no scaliness, and he has a good growth of healthy-looking hair.

In the *Lancet*, February 12th, Mr. MALCOLM MORRIS recommends the use of *thymol* or *menthol* in the treatment of cases of ringworm. He adopts the following mixture for local application:—

℞.	Menthol or thymol,	ʒ ss	
	Chloroform,	ʒ ij	
	Olive oil,	ʒ vj.	M.

Mr. MORRIS gives the following directions for the application: First let the part be well washed with soap and water, if it be not tender. After it is dried, rub the oil in gently, taking care not to irritate the parts too much. If there are scabs present remove them gently with a comb, after soaking them with the oil, which must be applied to the surface beneath. It is in chronic squamous cases that the rubbing is well borne, but it should nevertheless be done gently, and for several minutes, two or three times a day, in order that the parts may become thoroughly soaked with the oil. If at any time the slightest irritation is produced, stop the rubbing, and order the application to be merely smeared on; if it still causes irritation add for a time one-third more oil; but in the majority of cases the liniment will soon be tolerated of the proper strength. No cap should be worn in the house during the treatment, as it is essential that the head be kept cool.

Rhinacanthin, A New Remedy for Ringworm.

Dr. Liborius, having observed in China that the tincture of an unknown fibrous root was used successfully as a remedy for ringworm, obtained some of the plant, which turned out to be the *Rhinacanthus communis*, the plant of which the leaves, bruised and mixed with lime-juice, are used in India, as an application for the same complaint. According to the *Pharm. Zeit. f. Russland* and the *Pharmaceutical Journal*, Dr. Liborius has since obtained from the root a quinine-like body, supposed to be the active constituent. It resembles chrysophanic acid in being antiseptic and anti-parasitic. He proposes to call it *rhinacanthin*, and represents it by the formula $C_{14}H_{18}O_4$. It occurs only in intercellular spaces within the bark, which contain an intensely red substance, supposed to be a compound of rhinacanthin with an alkali. It forms with bases beautiful red compounds, easily decomposed by certain neutral solvents, such as petroleum spirit, which dissolve the rhinacanthin and assume a yellow color.

(To be continued.)

Correspondence.

A Case of Chronic Cystitis.

Ed. Med. and Surg. Reporter:—

Chronic cystitis being ranked among the most rebellious of maladies, and the prognosis regarded as unfavorable, I herewith submit a report of a case which occurred in my practice.

On the sixth of last September I was called to see Mr. Henry S., aged sixty four, married, no children, whose family history was good. To all appearances he had been a stout and vigorous man, but on presentation his features were pinched and careworn, expressive of much pain and anxiety. His history was as follows:—

Forty years previously he contracted gonorrhœa, from which he states he had never entirely recovered, the acute stage passing into gleet, and as this condition did not depend upon debility, or a strumous, rheumatic, or gouty diathesis, it must have been the beginning of stricture of the urethra, one of the most frequent causes of a gleety discharge following an acute attack of gonorrhœa. After a few years he noticed the stream of urine began to grow smaller, but so gradually as scarcely to attract his attention. Eventually he had some difficulty in emptying his bladder, which caused straining, attended with some pain in the organ and adjoining parts; along with the urine he noticed a ropy, mucous discharge. This condition excited but little alarm until the diminution in the calibre of the urethra became so great as to seriously interfere with its normal functions, and the urine began to escape without his consciousness. This condition was temporarily alleviated by the introduction of bougies, though not systematically pursued; finally, in consequence of the retention of the urine, it began to decompose and excite vesical inflammation. He had applied to a number of physicians without any permanent relief. When I was called, he only expected or hoped for temporary relief, believing his condition to be irremediable. Upon examination I found his condition as follows:—

A large, long, flabby penis; upon the introduction of a bougie a stricture was easily detected at the sub-pubic curvature, through which a number six French scale passed with difficulty, attended with a great deal of pain. The urine was turbid, acrid and offensive, containing pus, ropy and tenacious, nearly one-half of which adhered to the vessel when poured out, probably reaching a foot or more before breaking. By filtering the urine and applying the nitric acid and heat test, albumen was deposited. This condition did not excite any serious apprehension as to organic disease of the kidneys, as albumen is usually present in organic disease of the bladder, especially where there is a discharge of pus, being an evidence of structural change, or disorganization, in this instance confined to the bladder, as subsequent results verified. The bladder could scarcely tolerate a drachm of urine, in consequence of which the patient spent most of his time attempting to evacuate his bladder. His sleep at night was disturbed upon an average every thirty minutes, which had a telling effect on his general health. He also had hemorrhoids and swelled testicle. He had no sexual desires. I gave his friends rather an unfavorable prognosis, because of his age, the duration of the disease, and the apparent condition of his broken-down constitution. I began treatment by dilating the stricture, which required several *séances*, each time followed by a ten-grain dose of quinine, to prevent urethral fever. Night and morning I caused to be introduced into the rectum one of the following suppositories:—

℞.	Opii,	gr. xij	
	Camphoræ,	gr. xxx	
	Ext. belladon.	gr. iij.	M.
	Ft. suppos. vj.		

I also gave him tonics, composed of iron, quinine and strychnia, with enough podophyllin to keep his bowels gently regular. A liberal diet was recommended, stimulants were interdicted, except a glass of light wine for dinner. After having dilated the stricture to No. 22, French scale, I began treatment for the chronic cystitis, upon the plan so highly recommended by my friend Prof. T. G. Richardson, of New Orleans, beginning with a ten-grain solution of nitrate of silver. The urine was first drawn off and the bladder washed out with warm water; immediately afterwards the silver solution was injected into the bladder, through a soft rubber catheter, and permitted to remain one or two minutes, or until the patient began to complain of pain, when he was moved on his side and the solution allowed to escape. What remained in the bladder was soon neutralized by the urine, consequently it is unnecessary to wash out the bladder after the silver solution is used. After the injection was given, a ten-grain dose of quinine was given him, followed by thirty grains

of bicarbonate of potash three times a day. Seven days following a twenty-grain solution of nitrate of silver was used, the week following, thirty grains, and again the next week forty grains to the ounce of distilled water, each time observing the same preliminary treatment.

The following was then substituted for the bicarb. of potash :—

R.	Acid benzoic,	℥j	
	Sodii biborat.,	℥v	
	Fl. ext. kava-kava,	℥j	
	Fl. ext. eucalyptus glob.,	℥iij.	M.

Sig.—Teaspoonful three times a day.

This combination acts well; the "benzoic acid neutralizes the carbonate of ammonia of the decomposed urine, forming a soluble hippur ate of ammonia, which prevents the deposition of triple phosphates." The action of kava-kava is similar to balsam copaiba, and is less liable to disagree with the stomach.

Subsequently these injections of nitrate of silver, thirty grains to the ounce of water, were used, observing the same intervals as above.

The patient began to improve from the first injection, and four months from the time I began treatment he was discharged cured, without a trace of albumen in his urine, and remains well up to this time. J. M. Pace, M.D.

Dallas, Texas, July 21st, 1881.

A Case of Complete Transfixion Followed by Recovery.

Ed. Med. and Surg. Reporter:—

Among my memoranda are the notes of the following case, which, though occurring some years since, has never been reported in the journals, and which, on account of its unquestionable authenticity, is deemed of sufficient interest to lay before your readers at this time.

On the 5th of May, 1851, I was called, with Dr. H. C. Beshler, of Berrysburg, Dauphin Co., Pa., to see George Shreffler, a citizen soldier who had been shot under the following circumstances. The military company to which Shreffler belonged was practicing at target shooting, when he and a comrade went into the armory to load their muskets. In driving the cartridge home the ramrod in Shreffler's gun becoming wedged so fast that he could not remove it in the ordinary manner, he gave his gun to his comrade to hold, which he did by steadying it against his thigh, while Shreffler, by a succession of jerks, endeavored to extricate the rod. In so doing the hammer caught on the soldier's pantaloons, and discharged the piece, sending the ramrod and bullet through Shreffler's abdomen. The man who held the gun had a large hole burned in his pantaloons and was terribly frightened, thinking he was severely injured. Shreffler went to the door and called for help not realizing his own injury.

On our arrival, Shreffler was standing apparently unconscious of injury. The ramrod was driven fully three inches into a post, with the head and thick end of the rod bent to a quarter circle. The bullet lay on the floor, just behind where he stood when shot, and was of a concave-convex shape, accurately fitting the head of the ramrod. He was carried home, and an examination made, which showed that the ramrod had entered about one inch to the right of and two inches above the umbilicus, passing out between the crest of the ilium and the vertebræ. The wound, anteriorly, was small and round, but posteriorly it was ragged, and was attended by very slight hemorrhage. His hands were considerably lacerated. The wounds were dressed with lint, and opium sufficient to allay pain and to maintain the bowels in perfect rest, was directed. He was given nothing to eat or drink but a little wheat flour gruel, and was directed to keep perfectly quiet. Recovery appearing entirely out of the question, no encouragement was given the patient, excepting the promise of alleviating his condition as much as possible. Some four or five hours after the accident, there being strong reaction, he was bled freely, and the bleeding was repeated daily for three days.

Severe peritonitis set in, and on the fourth day the abdomen was distended to the size of a woman at full term, and was very tympanitic. A large blister was applied to the abdomen, which was dressed with mercurial ointment as long as it remained sore. In a few days the swelling and tympanitis began to subside, when hope of his recovery was entertained. The anterior opening of the wound healed in a few days; posteriorly it remained open, and the lacerations of his hands healed readily. His bowels were confined for two weeks, at the end of which an enema brought away a large quantity of fæces. On the following day a dose of castor oil was administered, which operated, the thin part discharging through the posterior wound, and the more consistent portion per anum. The urine was removed by the use of a catheter for ten days, after which it was passed naturally. A compress was now placed upon the patient's back, when the wound healed rapidly. He was allowed more solid food in small quantities, and in a month from the date of injury he was able to resume his trade, that of shoemaking.

At the time of the accident the patient's body was covered with the eruption of ichthyosis, which entirely disappeared during the treatment of his injury, and had not returned when last seen, a number of years later. Shreffler served as a private through the late war and is still living.

A remarkable feature in the case was the patient's perfect composure, to which his recovery was, in a great measure, attributable. He was, apparently, a very religious man previous to and during his illness, but afterward became quite as reckless as he had been devout.

Danville, Pa. J. Pursell, M.D.

Malformation of the Perineum.

Ed. Med. and Surg. Reporter:—

In September, 1880, I attended Mrs. T. in her first confinement. She was 22 years old, compactly built and in good health.

A digital examination revealed an unusual relation of the soft parts. The ostium vaginæ was very large. It extended nearly to the tips of the coccyx. As my finger passed along the posterior wall of the vagina it slipped into an opening which proved to be the anus, the inferior margin

of which was three quarters of an inch from the ostium vaginæ. The mucous membrane about the opening was corrugated, but the descending fœtus distended the vagina and smoothed out the mucous membrane and dilated the anus. I passed my finger two and-a-half inches through the opening into the rectum. There was no perineal body whatever.

After delivery, I found the sphincter ani offered as much resistance to the introduction of my finger as it does in the normal relation of the parts. The tissues which usually constitute the floor of the pelvis offered no resistance to the passage of the fœtus. The knees presented, and the labor was a tedious one, because of the small pelvis. Mrs. T. told me she had perfect control of her bowels; can retain her fæces as long as other women, but "everything comes out through the same opening;" and she has been in this condition since her earliest recollection.

This is a case of congenital malformation, in which the rectum terminates in the posterior wall of the vagina, where it is furnished with a good sphincter muscle; absence of perineum and perineal body and enlargement of the ostium vaginæ to include the space usually occupied by the perineum and anus.

The uterus was in every respect healthy three months after delivery.

H. J. B. Wright, M.D.

Olney, Ill., July 18, 1881.

News and Miscellany.

The Bell Induction Balance for Detecting Bullets.

The ingenious instrument devised by Prof. Bell, for detecting the location of the bullet in President Garfield's wound may prove a very valuable addition to our surgical resources. It is of such general as well as special interest, that we believe our readers will be pleased to have a full description of it laid before them.

The balance, as now modified, though not essentially new in principle, is more sensitive to small masses of metal at a distance, and better adapted to the requirements of military surgery than anything of the kind hitherto devised. The apparatus, in its present improved form, consists of two flat coils, about four inches in diameter and one-half an inch in thickness, of insulated copper wire; a battery, a condenser, an interrupter or circuit breaker, and a telephone. The ends of the primary or inducing coil are connected with the poles of the battery, and in the same circuit are a condenser and a small interrupter, whose vibrating tongue opens and closes the circuit with great rapidity. The ends of the secondary coil, in which the current is to be induced, are carried to the binding posts of a Bell telephone. When the connections have thus all been made, the secondary coil is laid on the primary or inducing coil, so that their respective circumferences exactly coincide. The circuit breaker is then set in motion, and the rapidly interrupted current through the primary coil induces another current of higher intensity in the secondary coil, and, as it does so, a loud musical tone is heard in the telephone with which the secondary coil is connected. As long as the current is maintained and the circumferences of the two coils are kept in exact coincidence, the musical note in the telephone does not change its pitch or intensity. If, however, the experimenter slides the upper coil along an inch or so upon the corner, so that their circumferences no longer correspond, the intensity of the musical tone is diminished, and just in proportion as the centres of the flat coils are separated by a greater or less distance the intensity of the musical tone is lessened or increased. When the upper coil has been slidden over the lower, so that they simply overlap, the centre of one corresponding nearly with a point on the circumference in the other, the musical tone in the telephone ceases. If the upper coil be pushed a little further to one side, so that it overlaps still less, the tone is again heard. By delicate manipulation it is possible to adjust the centres of the overlapping coils at such a distance, one from the other, that a perfect balance is brought about, and when this is the case, the telephone makes no sound whatever. The centres of the overlapping coils cannot then be moved either toward or away from one another without causing the telephone to break its silence.

When the coils are thus balanced and the telephone is mute, it is found that what may be called the area of coincidence, or, in other words, the area of the overlapping parts of the two flat coils has become highly sensitive to the approach of metal, and manifests its sensitiveness by a low note in the telephone. As long as metal is kept away from this area the telephone remains silent, but if a piece of lead, for example, is brought within a distance of four or five inches from the overlapping parts of the coil, there may be heard in the telephone a faint but clearly perceptible note, which becomes louder and louder as the metal approaches the sensitive surface, and throws the coils more and more out of balance. It will readily be seen that under the guidance of the telephone, the small area bounded by the intersecting circumferences of the overlapping coils, can be placed exactly above a bullet or other piece of metal embedded in the body, provided the metal does not lie at too great a depth. As soon as the balanced coils begin to feel the disturbance caused by their approach to the imbedded bullet, the telephone announces the fact by a faint, continuous musical note, and this note grows louder and louder until the overlapping parts of the coil are directly above the disturbing metal, when the sound reaches its maximum. For convenience of application to the body the coils used by Professor Bell were mounted in a rectangular piece of walnut, about seven inches in length by four in breadth, with screw posts at the corners for the wires and a handle at the back, by which it could be held.

The apparatus audibly and unmistakably detected the presence of a leaden bullet held at a distance of three and one-half inches from the sensitive area of the secondary coil, this being a half inch beyond the distance which Professor Bell set himself the task to attain. Even greater, though less pronounced results have been attained: a bullet disclosing its presence in one experiment at a distance of five inches. In this experiment a curious fact was noticed. At a

distance of three and a half inches or less, the fundamental musical tone of the vibrator was conveyed through the telephone to the ear of the operator. But when five inches distance was reached, the resultant tones were two octaves or more higher than those of the vibrations. Thus, in some mysterious manner, the laws of harmony are found to be related to those of electricity, and may in the future play a not unimportant part as an auxiliary to the work of practical surgery.

An old soldier who was shot in the breast in the war of the Rebellion, and who still carries the bullet in his person, was made the subject of experiments, and the presence of the metal below the shoulder-blade was made distinctly audible.

Leprosy in Louisiana.

The annual report of the Louisiana Board of Health for 1880, just issued, contains a detailed statement of the progress of the Asiatic leprosy in that State during the last century. It was brought, in 1680, to the West Indies, by the negro slaves, and thence to Louisiana. In 1778 this disease was so prevalent among the blacks, together with the African elephantiasis, and another equally horrible, named yaws, peculiar to Guinea negroes, that a hospital for lepers was established in New Orleans. At the present time the majority of lepers in that city are found to be whites, of French, German and Russian extraction. The disease seems to be hereditary, and certain families are known to be infected by it, and are shunned as corpses would be, could they walk and move about, spreading the contagion of death. The mother of one of these families, when the disease showed itself, was deserted by husband and children, and nursed until her death by a young girl, who is now a victim to it. An Italian Catholic priest who attended cases of leprosy in the Charity Hospital is now dying of it in the same house. New Orleans, it appears, has no separate asylum for these incurable patients, and they are received into the Charity Hospital and placed in the crowded wards, to scatter death.

Dr. Joseph Jones, the President of the Board of Health, has made a personal investigation into the extent of this disease, even venturing into the deathly swamps of the lower Bayou Lafourche. This whole district, he states, is several feet lower than the turbid bayou, sloping back into cypress swamps liable to constant overflow from crevasses. The poor Creole inhabitants live in low huts surrounded by wet rice fields, living upon fish and fish eating birds. They are separated from the rest of the world and have intermarried for generations. So impregnated with disease is this remote region that some of the exploring party were struck down on reaching it, with violent hemorrhages and fever. Of all foul corners of the world it is the fittest for the disease most dreaded by man since the beginning of the world, to hide with its prey. Below Harang's canal, President Jones found Asiatic leprosy existing in different generations of six families. Some of these wretched creatures have been driven out from human habitation, and are living apart in the swamps, dying of decay. In some instances their flesh had become as insensible as bone, and they were able to handle fire with impunity. It was impossible to make a correct estimate of their numbers, as a rumor spread among them that a searching party had come to carry them off to an uninhabited island of the sea, and they hid themselves, their friends, too, refusing to tell their names or number.

Deleterious Beverages.

Several cases of poisoning from lemonade made with tartaric or other hurtful acids have been reported this summer; and others have been poisoned by the various bottled beverages consumed so largely in the hot weather. The London *Sanitary Record* says, on this subject, that the sources of poison in drinks of this kind are twofold, being either due to incidental impurities in the ingredients—whether acids or salts—or to their action upon the mechanical fittings of the bottles in which they are enclosed, or to the apparatus in which they are made, and the consequent production of symptoms of lead poisoning. Some time since, when public attention was directed towards the subject considerably, more or less important quantities of lead were found to be frequently present in the artificial lemonades of commerce and in other artificial aerated drinks. Organic and mineral impurities are not the worst enemies which the consumers of artificial waters have to fear when these waters are not prepared from sources of the utmost purity. There is a well-known case in which a shooting party, who partook freely of artificial mineral waters, were, on separating, attacked in their different homes by typhoid fever, traced to the organic impurity of the drinks which they had been consuming. The occurrence of startling incidents such as these serve especially to direct attention to the advantages of an absolutely pure natural mineral water. One of the first circumstances which gave a great impulse to the popularity which Apollinaris Water has now so largely achieved and so firmly established, was the public statement of an eminent hospital physician in London, a Fellow of the Royal Society, in which he described how he had himself been suffering for many months from chronic symptoms of poisoning, of which he was unable to determine the source until, having identified the cause of his disease as being lead poisoning, he succeeded in tracing it to his habitual use of soda water in syphons. The soda water had taken up enough lead from the fittings of the syphons in which it was enclosed, frequently for long periods before use, to produce the symptoms of chronic lead poisoning.

Probability of Cheap Quinine.

The trade journals state that quinine will probably be much cheaper, owing to the large production of cinchona bark, the stock in the port of London alone amounting to over 37,000 packages. The point seems to have been reached when the supply can more than meet the demand, unless, under very exceptional circumstances, and it is likely that a period of low price

for quinine will now set in. At present, the prices for English and French manufacture are high in comparison with those for German make, in consequence of special contracts. It is quite certain that, for some time to come, the arrivals of bark will continue to increase, and it is probable that the proportion of the imports rich enough in alkaloid to be worth working will also become larger. That a further reduction will result in the price of quinine, if no exceptional demand should occur, is almost certain, and it may be considerable.

Holders of South American barks who have tried to maintain prices for some time, and have refused to let their stocks go, have lately had to put them on the market.

One of the chief influences affecting the cinchona market, has been the introduction of the so-called Cuprea barks, which seem to be well suited for manufacturing purposes. These barks come from the State of Santander, in Columbia, and it is yet unknown to what extent a supply from that source may be expected. The bark is named "Cuprea," from its copper-looking appearance.

An interesting experiment is to be tried in West Central Africa, by the members of the Livingstone Inland Mission. Seeds of the different species of cinchona, which have been obtained from the government plantations in India, are to be sent out to them with a view to ascertaining whether it could be successfully cultivated in the mountain valleys of the Congo.

The Yield of Opium.

A correspondent of the *Chemist and Druggist* writes from Smyrna to that journal, about the opium crop :—

This season's yield, according to all appearance, will be one of the most abundant ever known. The sowings were enormous, in consequence of the cheapness of the poppy seeds and the extreme dearness and scarcity of all other grains. The high prices of last year further encouraged growers to sow opium, and their crops have been favored by rains just when necessary, and by exceptionally propitious temperature, so that there is prospect of a supply which was, perhaps, scarcely hoped for even by the growers.

Items.

—The deaths in New York City during July numbered 4250, against 3380 during July, 1880.

—Professor Charcot, the eminent Paris neurologist, is said to have been paid $10,000 for a consultation in St. Petersburg.

—Dr. Clouston's criticisms of our extravagant and wasteful system of caring for the insane are perfectly justified by the facts, the *Courier-Journal* thinks.

—A scene both ludicrous and ghastly was presented in a recent case of attempted suicide in Columbus, Ohio. The woman who wished to end her life hired a little boy, ten years old, to assist her in the desperate deed. She succeeded in breaking, not her neck, but her nose ; and at the subsequent judicial investigation that was made the the boy testified as follows: "She got on the box, and I asked her for the ten cents before she put her head in the rope. She wouldn't give me the ten cents, and I let her go, and she didn't put her head in. She hollered and fell down, and then you men came running, and I got out of the way."

OBITUARY NOTICES.

GOVERNOR GOVE SAULSBURY, M.D.

Gove Saulsbury, M.D., died July 31, at Dover, Delaware, after five days' sickness. The Doctor was the son of Thomas Saulsbury, and was born in Mispillion Hundred in 1825. When he had finished his medical studies he settled at Dover. Having a taste for politics, he entered actively into the campaigns and was soon honored with a seat in the Senate. Subsequently he was elected Speaker. In 1863, when William Cannon, the then Governor of the State, died, Dr. Saulsbury was the person who, by virtue of his office, was elevated to fill the Governor's place, and subsequently was re-elected. Later in life he gave up politics, applied himself assiduously to his practice, and was only interrupted by failing health. Although he had thrived and become moderately wealthy, he still attended office patients with the faithfulness and skill of younger years. He was a consistent member of the Dover M. E. Church, and one of its largest contributors.

REV. STEPHEN TOWNSEND, M.D.

Died July 29th, in this city. He was born in 1804, and was one of the oldest preachers connected with the Methodist Episcopal Conference of this city. When nearly sixty years of age, he began to study medicine, and graduated from the Jefferson Medical College in 1865, and also took the degree of Doctor of Philosophy and Medicine from the University. He was the father of George Alfred Townsend. the journalist, and of the late Dr. Ralph Townsend of this city.

QUERIES AND REPLIES.

Impotency.

Dr. R. H. Sabin, of West Troy, would suggest to Dr. J. D., of Mo., the use of fluid ext. of damiana in 10 drops doses three times a day, as one of the best remedies he ever used for that difficulty.

[We should like Dr. J. D. to report the success or failure of this drug, if he uses it. In our own practice it has failed. ED. REPORTER.]

Zeta.—The notion that fish is "brain food," and that its consumption strengthens the intellectual powers in some special manner, we have always regarded as an absurd hypothesis.

Dr. M. K. A., of Ind.—The *Archiv für Klinische Medicin* is published in Leipsig. Subscribe through E. Steiger & Co., New York City.

Dr. M of Texas.—We shall endeavor to procure from a competent hand an article on the subject you mention.

DEATH.

ATKINSON.—On the 22d ult., ELIZABETH P. widow of the late Samuel Atkinson, M.D., in the 84th year of her age.

THE

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Communications.

INVESTIGATIONS IN RELATION TO THE CAUSE AND CHARACTER OF THE DIPHTHERITIC POISON, WITH NUMEROUS INOCULATIONS.

BY J. T. EVERETT, A.M., M.D.,
Of Sandusky, Ohio.

It would seem almost like an unwarranted presumption in me to attempt to add anything to the literature upon this disease, which has been elaborately treated by such ancient authorities as Hippocrates, Aretus and Macrelius, by Frost and Bonanzalinus, by Cresales and Villa Real, Fontecha and Herera, Vasques, Carnaval, by Scambatti and Nolla, Severinus, Ghisi, Fothergill, Huxam, Withering, Keetly, Johnstone, Grant, Bard, to say nothing of more recent writers, who in our own time have nearly solved the problem relating to the etiology of this disease.

According to very many prominent men, the "materies morbi" of Diphtheria is a vegetable spore of such minuteness that only the most powerful microscopes can distinguish it.

Notwithstanding the minuteness of these germs, their abundance and constant appearance have enabled microscopists to study and classify them with exactness.

The following is the generally accepted classification of Cohn:—

1st. Micrococci—Spherobacteria.

2d. Microbacteria—Bacteria Termo, Bacteria Sineola.

3d. Spirobacteria—Spirillum Tenne, Spirillum Undula.

4th. Varied unclassified forms—1st. Sage cocci with sprout-like processes; 2d. cocci with tube-like cells; 3d. cocci with waving processes.

In order to determine the origin of the first diphtheritic germ, we must first decide upon either a "*special creation*," as a starting point in "organic life," which shall apply as well to the bacteria as to the man, the palm or the mastodon; or, we must admit a "spontaneous generation," and the evolution of species from the "environment."

With this aspect of the cosmogeny of organic life the scope of this article has nothing to do. We know that sporadic cases of true diphtheria do occur, where there is no appreciable cause, and we seek in vain for the primordial germs of such cases. The scope of this paper is simply to take the germ as we find it, 'ready made," and follow its varied metamorphoses in its journey upon its mission of *death*; and from a somewhat extended and laborious research seek to establish the following conclusions:—

These bacteria are composed of protoplasmic matter which, from occult cosmic force, possesses a greater amount of vitality than the normal tissues or other septic material. This diphtheritic germ ripens in its soil, is disseminated throughout the surrounding atmosphere. Alighting upon the epithelium of the mucous membranes of the air passages it commences its onslaught upon the integrity of the cells.

These germs pass by a species of osmosis into and among the granular protoplasm of the epithelial cells, impregnating the nucleus with their disease germs, while a portion of the hyaline substance is converted into new cocci. At the same time the bacteria absorb a portion of

the cement substance of the epithelial cells, thus destroying the integrity of the membrane, burrow down between the cells, displacing them and pushing them up above the general level and building up a substructure of micrococci, and by a rapid reproduction of disease germs spreading the contagion to the surrounding tissue. They also penetrate the mucous capsules, break down their internuclear network and absorb their hyaline contents. This process is rendered the more readily possible on account of the soft condition of the cell substances and of the semi-fluid consistence of the cement substance.

This exceeding pliability or elasticity of the tissues explains the phenomena of the elevated patches observed at the onset of this disease, before the poison has invaded the entire economy and before the patches have become confluent.

After having wrought the above mentioned mischief in and among the epithelial cells of the mucous track, the cocci penetrate the connective tissue, dissolving and appropriating the cement substance, separating, softening and finally destroying the ultimate fibrils and propagating a new supply of cocci to further infect the subjacent tissues.

Thus by the astonishing industry and activity of these morbid germs among the fibrous threads and cells of the tissue, separating, infiltrating and enlarging them, the nerves and vessels are encroached upon, shutting off all or a portion of their circulating capacity, and gangrene and death supervene. These same migratory germs attach the walls of the capillary vessels, dissolve their cement substance and absorb such portions as are required for their nutrition; displacing and destroying the endothelial cells, penetrate the vessel and occlude its passage, allowing the contents to escape through the broken surface into the surrounding tissue. Entering the circulation they attack indiscriminately and destroy the leucocytes, the hæmocytes, the albumen and fibrin of the blood.

First attacking the white corpuscle, it is broken up into a coarse granular detritus; thus cutting off the supply of red globules, it destroys and absorbs the embryonic cells with equal avidity. Penetrating the already formed red globule, it causes it to break up into a red pigment, granular mass, which penetrates the vascular walls into the surrounding areolar tissue.

The fibrin seems to be the most readily utilized tissue for these cocci, of all, increasing and uniting with them with wonderful rapidity.

After these poison germs have wrought the above mischief with the tissues of the fauces, they spread into the pharynx and larynx, where, coming into contact with the columnar epithelium, a different kind of activity is manifested, modified by the different function of the cells.

The secreting cells are at first stimulated and excited, and throw out a species of croupous or fibrinous deposit; but secondary disintegration follows, and the same morbid activity supervenes as in other tissues.

Passing still further down into the air passages or alimentary tracts a modified action is observed, determined only by the character of the tissue involved and the resistance it offers to the infecting germs.

Ascending into the superior buccal cavity, nares, Eustachian tubes, middle and internal ear, it ravages and destroys the parts with fearful ease, to a degree dependent only upon the amount of the poison and the resistance of the subject.

Passing still further up into the brain substance it acts upon the functional position, deranging the intellection, and the coördination.

The spherobacteria and the microbacteria seem to be the most virulent of the entire series of cocci, devouring with equal relish the healthy tissues, pus globules and other septic germs not connected with them by ties of consanguinity. These vandals, in their migrations through the tissues, seize upon whatever impedes their progress with an omniverous avidity; penetrating the areolar structure, they destroy the muscular fibrils, nerve sheaths and matter, both gray and white.

This explains the numerous cases of paralysis which follow or accompany the advanced stages of this disease, both by destroying the tissues in the immediate vicinity and by shutting off the nerve supply to distant parts.

The endothelium of the uriniferous tubules and the Malpighian bodies seem to present a very prolific soil for the implantation of these cocci. In these cases the germs are carried through the circulation and dropped upon this prolific soil. These germs at once attack the membrane, burrowing into and among the cells, forming a mass of cocci beneath them, lifting them off, giving rise to the epithelial and hyaline casts which are so pathognomonic of this disease. At the same time, from these denuded surfaces albumen is effused in large quantities. The isolation of these micrococci from the renal excretions was for a long time questioned, but the fact is now established on too firm a basis to require discussion. The mode of ingress and action in the lymphatic system is entirely analogous to that of the rest of the circulatory apparatus: Destroy-

ing the lymph corpuscle as it does the blood globules the interglandular network is broken down and extravasation of lymph corpuscles takes place, producing at first hardening of the tissues, followed by softening and suppuration.

The mode of procedure of this germ in the stomach, liver, bowels, spleen, pancreas and other viscera is analogous to its depredations in other similar organs, and need not be enlarged upon here, but will be more fully noticed in the report of experiments to follow.

These experiments have extended over a period of ten years. At first, not being aware of the valued researches and methods of investigation of the eminent men whom I have since consulted, my investigations were original and crude, lacking method and result, yet during the major part of these years I had believed that the materies morbi consisted either of animal or vegetable spores, but having only a microscope of low power the search for the germs was unsuccessful.

Later, reading the works of various authors, I procured a perfect instrument and continued my researches with the following results. Knowing that the literature upon the etiology, course and treatment was well understood by the profession, and that there was, therefore, little to be learned in that direction; and learning from Oertel, Klebs, Hüter and Virchow, that the germs were infinitely small and difficult to isolate and study their natural history, this branch of the subject appeared to be the field in which to labor.

The first cases were studied only in a general way, while the later cases were studied in pursuance of a definite plan, and a series of inoculations of the different germs made, with the following results:—

Case 1.—8 A. M. Placed a minute portion of diphtheritic membrane upon the conjunctiva of a rabbit, which was of medium size and in good health.

12 M. Rabbit lays in the corner of his cage with drooping ears and paws over the eyes, from which a watery exudation takes place.

7 P. M. Eyes injected, lids tumefied and œdematous, grayish white exudation around point of infection; discharge whitish and milky from both eyes. A slight running from the nose, accompanied by fever, unrest, thirst and pain.

8 A. M. Rabbit dead: eyes covered with a thick brown deposit which can be removed, leaving a raw, ragged surface, lids tumefied and œdematous. Larynx and pharynx heavily coated with diphtheritic deposit; lungs engorged and larger bronchi filled with white cheesy deposit, evidently disintegrated fibrinous deposit. Vessels full of dark venous blood, showing that rabbit died of strangulation from the occlusion of the air cells and bronchi. Lymphatic vessels and glands hard and filled with a cheesy deposit. Kidneys nearly ready to exfoliate.

Case 2.—8 A. M. At the same time, and with the virus, inoculated a healthy full grown cat by placing a plaque of diphtheritic membrane upon the dorsum of the tongue.

5 P. M. Cat feverish, restless and uneasy; slight discharge of saliva and suffusion of eyes. Nose dry and pale. Tongue slightly coated at end and edges, centre and posterior portion covered with thick deposit.

9.30 P. M. Restless, feverish and thirsty; shows mental and moral obliquity, spits alike at friend and foe. Could not examine mouth satisfactorily on account of teeth and claws.

6 A. M. Fever subsiding; tongue heavily coated with grayish white deposit, which is easily detached. Fauces in the same condition. Lymphatic glands hard and tender. The cat was now anæsthetized and five minims of a saturated solution of sodii sulphatis was thrown into the areolar tissues of the neck. The throat was carefully swabbed out with a saturated solution of potassium chlorate, acidulated with acidum hydrochloricum, until fumes of chlorine escaped. One ounce of a two per cent. solution of carbolated water with ¼ of 1 per cent. of potassic permanganate, was thrown into the bowels.

10 A.M. Cat fully recovered from the anæsthesia, but restless and uneasy, suffering from fever and pain at the point of injection in neck.

12 M. Confined cat in a vapor of oxygen with a slight trace of chlorine. Respiration rapid and excited; considerable febrile action still.

4 P.M. Evident amelioration of pain and distress. Faucial membranes clearing off; bowels moved freely.

6 A.M. Cat has expelled large masses of diphtheritic membrane and is evidently improving, takes milk freely and evinces pleasure upon being caressed, but upon attempting to purr is seized with coughing and sneezing.

Cases 3 and 4.—Inoculated two pigeons, no result.

Cases 5 and 6.— With a portion of the exfoliated tissue from the throat of the above mentioned cat two healthy adult rabbits were inoculated, one on the right tonsil and the other upon the left conjunctiva. This membrane was removed from the cat at 4 P.M., after recovery had set in. As neither case produced any result, it is to be concluded that the treatment had rendered the poison harmless.

The cat was now killed and the following conditions found. Fauces and larynx presented granular denuded tissue, lower respiratory track covered with light friable membrane. Liver and spleen engorged with red blood.

Interlobular septums broken down in some places and tissues much softened.

Kidneys showed evidence of intense activity. Uriniferous tubules full of hyaline and epithelial casts. Malpighian bodies composed of granular detritus. Cortical substance more soft and pale than natural, infiltrated with urinous and albuminous deposits.

Sept. 10th. Boiled a fragment of beef and filtered the extract. Boiled and filtered a plaque of diphtheritic membrane. Mixed the two filtrates, diluted ten times and enclosed in sealed tubes.

Case 7.—Sept. 20th, 8 A.M. Inoculated rabbit on tongue with the contents of tube No. 1.

12 M. Tongue slightly furred; thirsty. Fauces show several red patches with elevated surfaces.

6 P.M. Grayish deposit appearing on fauces. Lymphatic gland swollen and tender, cough and fever well marked.

9 P.M. General symptoms much the same. Urine loaded with lithates, phosphates, albumen and epithelial casts.

9 A.M. Rabbit much better; urine less heavily loaded with detritus; faucial patches exfoliating, leaving a denuded surface which exuded a clear fluid.

Complete recovery.

Case 8.—Sept. 30th. Opened tube No. 2 and injected a portion of its turbid contents into the areolar tissue of the neck of a healthy adult rabbit.

12 M. Marked febrile action; lymphatic glands near the point of infection swollen; afferent vessels full and tense; tonsils coated.

6 P.M. Suffering; high fever; thirst.

9 P.M. Pyæmia fully developed.

7 A.M. Found rabbit dead. Lymphatic vessels and glands dark, livid and full of debris; larynx and entire mucous track clogged with exfoliated membrane and dark granular matter; liver engorged; tissues of spleen and kidneys broken down; Malpighian corpuscles entirely disappearing; tubules friable and full of water.

Case 9.—Oct. 10th, 8 A.M. Opened the last tube and infected (?) adult healthy rabbit; watched the case for four days, but no symptoms of disease appeared.

Case 10.—10 A.M. Again, with a portion of the last tube, injected the same rabbit, with the same result.

Case 11.—8 A.M. Inoculated adult healthy rabbit with fresh diphtheritic poison upon right fauces.

11.30 A.M. Faucial redness with slight exudation.

4 P.M. High fever; cough and laryngeal râles; tongue furred in centre with red edges; diphtheritic exudation at point of contagion.

6 P.M. Trouble increasing.

6 A.M. Rabbit dead. Post-mortem appearances: intense faucial destruction, extending up into nares and ears, passing down bronchi, and lungs and stomach congested; liver and spleen nearly normal; kidneys in an advanced stage of disintegration; blood vessels clogged with debris, small ones ruptured and extravasated.

Case 12.—8 A.M. With a minute portion of poison from the fauces of a child twelve hours dead from diphtheria, inoculated conjunctiva of rabbit.

4 P.M. Moderate fever; pharynx red and injected; commencing effusion.

9. P.M. High fever; thick grayish patches covering fauces; eyes closed; lids œdematous; conjunctiva covered with dark brown membrane.

10 A.M. Rabbit died during the night; examination presented the usual appearances; the eye injected was entirely destroyed; in places the conjunctival layers were glued together and in others were separated by the deposit.

The humors full of floating granular matter. A portion of diphtheritic tissue from the same source as the last case was divided into three parts, one of which was triturated with a five per cent. solution of acidum carbolicum, another with a one per cent. solution of potassic permanganate, while a third portion was triturated with a five per cent. solution of aqua chlorinii.

Case 13.—8 A.M. Applied a drop of solution No. 1 to the tongue of a rabbit of full size and health.

4 P.M. No symptoms; 9 P.M., none.

6 A.M. Slight febrile symptoms; white exudation appearing.

12 M. Buccal cavity thickly coated and symptoms well marked.

4 P.M. Febrile symptoms subsiding. Local symptoms still in statu quo. Cough and nasal discharge. Urine high colored.

9 P.M. Symptoms improving; exudative deposit falling off, leaving granular membrane beneath. Urine lighter and containing less solid matter. Recovery.

Case 14.—Two days later.

8 A.M. Applied portion of tube No. 2 to fauces of rabbit. 12 M. No result. 4 P.M. Slight malaise. 9 A.M. Redness at point of in-

fection. 12 M. Slight exudation and febrile symptoms. 10 P.M. Symptoms much the same but deposit thicker and more opaque. 10 A.M. Slight fever and thirst; membrane spreading into posterior nares; faint, moist râles; urine slightly turbid. 4 P.M. Deposit has exfoliated leaving red, granulating surface. 9 P.M. Fauces more natural.

10 A.M. Third day: symptoms nearly normal, except watery eyes and albuminous urine.

(To be continued.)

THE PROTECTION OF THE PUBLIC AGAINST VENEREAL POISON.

BY GEORGE B. H. SWAYZE, M.D.,
Of Philadelphia.

The questions to be considered in reference to this subject are such as the following:—

Are there no available means of curtailing the propagation of the venereal poison, and preventing its terrible consequences? Is it useless or immoral to get this devastator of health and life under some form of legal control, for the purpose of promoting its subjection? Is it more immoral to devise legal methods of suppressing its propagation, than it is to leave it to ravage throughout all elements of society? Are there any existing institutions in America that appreciably lessen the physical infections of the social evil? These are questions that stare us in the face on every hand and every day.

The limits of this paper prevent more than a cursory glance at a few of the phases of the subject. Passing speculative arguments in general, and the literature of foreign policies regarding the suppression of venereal diseases, the writer will here confine himself to considerations of the nature and dangers of the social evil in our own land, and ask some attention to the adoption of practicable means for the protection of society against the vices of prostitution. For the purpose of intelligently studying the complicated problem before us, at material expense of time and labor, facts as they are have been gathered for the writer's use, that he might know whereof he spoke and speak whereof he knew, and possibly be enabled to throw some feeble light upon indications of remedies for the gravest and saddest evils that afflict the present generation.

It has been authoritatively affirmed that every harlot inevitably becomes a source of disease, and, for the sake of a livelihood or gain, spreads it abroad as inevitably. They studiously keep aloof from salutary moral influences. They are largely self-elected outlaws, engaged in outlawry against the dearest interests of society. With about 100,000 such creatures in the United States, one half of whom are hardened and determined, it cannot be supposed the American people can escape contamination, both physical and moral.

It has been coarsely affirmed by certain female opposers of legalized restrictions of prostitution, that "if men are so brutalized in their passions as to resort to houses of prostitution for lustful gratification, they deserve to suffer the penalties." But such philippics indicate a narrow comprehension of what is involved in the complex problem. To hypothecate that man in whom a more or less disturbing sexual appetite has developed is brutalized because he seeks the association of women, is, in the abstract, a defamation of the sex he solicits. Individual experience and predilection should not be made the criterion for all others.

On the great moral subject of diminishing the national evils of venereal infection few writers and speakers in this country have dared to raise a voice. The reason of this reticence has been the mistaken one, that the long recognized prerogatives of prostitution must be guarded from the publicity of assault on account of their indecencies. Should a flagrant evil be granted unrestrained license, rather than legislate for its restriction? The contagions of venereal diseases are among the most general and persistent in existence. They produce a degenerative modification of function. Their cachexia predisposes the system to invasions of many diseases. The lungs, liver, glandular system, skin, uterus, brain, are organs specially prone to injuries of syphilization; and many of their diseases are expressions of either direct or transmitted venereal infection of the blood. The wealth and greatness of a country are vested in its population. Any contagion that specially devastates population is a national calamity. Venereal poison is such a contagion. By its enervation of the vital forces multitudes of children are deprived of the boon of life before they are born; and the blight of death is visited on yet larger multitudes of children before they reach the age of five years.

Many have acknowledged the necessity for limiting this poison, but what have they proposed?

One anxious lady writer asks, "Is there not virtue enough in the land to induce legislation in favor of shutting up houses of prostitution, and of so destroying one means of poisoning the atmosphere of their localities and the nature of those who frequent them? Desperate circumstances require the application of desperate means to better them." But it is not the houses

that spread the contagion. It is the courtesans and their patrons. So long as other houses may be obtained by prostitutes, the spread of venereal poison proceeds unchecked.

Another friend of reform asks: "Would it not be better for the world, for herself, if the public woman was kept in the prison cell or workhouse all her lifetime, than to let her run at large and ply her dreadful vocation?" But where is there prison room for a hundred thousand abandoned women? How are they to be supported? controlled? moralized? made self-respecting? womanly? New recruits are constantly being added to the ranks of prostitution. What shall be done with these? Without registration of houses and inmates, how can executive officials determine who are the guilty?

There is another rock on which sentimentalism and candid reasoning split—medical examination of the courtesan. The practical reformer advocates a sanitary morality. He knows that contagion is not suppressed without cleanliness and therapeutic medication. Opponents to legal control of contagion cry out indignantly, "this examination is a tyranny, an infamy." One writer declares this medical examination of prostitutes for the purpose of suppressing venereal diseases "an invasion of the most sacred part of their physical nature—execrable." But would there be either justice or reason in consigning these unfortunate creatures to prison for life and let them die, rather than humanely institute measures for cleansing and healing? Which would be the greater "indecency and offense"? What are the facts?

As to the right to close houses of prostitution, there has been legislation already, if the charge of "disorderly conduct" is proved. But it is seldom that a bawdy-house is ferreted out and shut up. Who is to produce the proof upon which to establish conviction? No charges are preferred on the ground of venereal poison, physical and moral pollution, that should be brought under sanitary control.

As a sanitary preventive of venereal contamition, many worthy, liberal thinkers advocate the multiplication of Reform Homes and free dispensaries and hospitals for the admission of the fallen and the treatment of venereal infectious. These institutions are beneficent in purpose, but utterly fail to prevent or perceptibly reduce venereal disease. These institutions do not operate as preventives. Especially with women, going voluntarily to a hospital, "to be burned," as they term the treatment, is like going voluntarily to have teeth extracted—they don't go unless pressed to do so. In the absence of any timely efficient moral agency bearing upon their action they apply for relief *after* their systems have become so fearfully diseased that, through broken health or repulsiveness of person, they can no longer successfully ply their vocation. Earning, by the use of their person instead of by the use of their brains and their hands, the money that must clothe them, pay their high-priced board and contingent expenses, these women are never ready to voluntarily "stop business" for any medical treatment they imagine they can dispense with. As a rule, they have no money ahead for a "rainy day." Usually they are ignorant on the subject of venereal diseases. They have never listened to a lecture or read a paper relating to the physical perils connected with their position. Such a woman becomes infected; has a chancre, perhaps a large one, located in parts she cannot inspect; experiences derangement in health; don't know what is wrong; continues her daily precaution of washing; *sees* but little "show;" continues plying her vocation, perhaps with some discomfort, of which she reveals nothing to her customer; chancres multiply; her voice becomes hoarse; she thinks it a cold; is feverish; takes a glass of hot gin, for perspiration; a cough ensues; she buys a bottle of expectorant from a druggist; continues plying her "business" until she breaks down and is compelled to go to some hospital. Who can estimate the consequences of the contagion she spreads before she applied for the relief the hospital gratuitously offers! Through a hundred causes, girls and women may find themselves on the down grade of prostitution before they are fully aware of it; they simply have learned such women may "get the disease;" but each one fancies she will have better luck and "keep all right"—until she realizes that she has been unfortunate and is "all wrong." If appealed to on the subject of her danger, she indifferently replies: "Well, I must do something for a living—I must take the risk, like other women:" She gives no thought to the welfare of those who are endangered by her.

As a means of preventing the spread of venereal poisons, the Magdalen Homes are without result from the fact, that they are sought by an exceedingly small number. The "Midnight Mission," in this city, located in a neighborhood of social evil dens, seldom has over fourteen to eighteen inmates, notwithstanding the advertisement of the objects and gratuities of this institution regularly appears in the *Public Ledger*, that goes to nearly every house. The

erring must be followed up, sought, and brought under reformatory influences; but a small number, indeed, will ever come. Therefore, for the efficient working of even this form of remedy, some system of registration and surveillance is clearly essential. There is an important feature of the school of correction plan for wayward girls, advocated by opponents of enforced legislative restraint, which seems to be out of harmony with the general tone of their special pleading. It is the element of *enforced restraint* to which these girls are subjected by being placed and detained in these institutions. Now, if it be right to place wayward girls just starting on a downward career under reformative restraint, it is also right to place *abandoned* girls and women under conditions of sanitary and moralizing restraint. In regard to the rescue of Magdalens in another city, Prof. Andrews says, that of the women who came voluntarily, more than half were permanently reformed; where sent against their will, after being released, some returned voluntarily, and became permanently reformed. The Magdalen Homes in Philadelphia fail to prevent the spread of venereal poison, from their system of exclusion. If a woman is found to be "diseased," she is sent away. In the language of Judge Allison "they deny their benefits to those less fortunate." It is probable that the moral force of legalized control of the social evil might enhance the desirability and usefulness of these asylums for erring women, and promote voluntary applications by many who now pass them with contempt. Any legislative acts that would deter girls and women from entering upon lives of shame must secure to themselves, and to humanity unbounded benefits.

If a case of non-venereal contagion occur in Philadelphia, the physician is required by law, under a liability of heavy fine, to report that case to the Board of Health; and, if considered necessary, an inspection of condition and situation is immediately made by an attachè of said Board, for the purpose of adopting measures for preventing the spread of the contagion. This precaution being necessary for the protection of society against fluctuating causes of contagion, why should not the constant dangers from venereal infection be brought under equally stringent control? Under existing statute, police officers are nearly powerless as conservators of the public safety; they can occasionally raid a house if complained against as "disorderly;" arrest the inmates; have the "mistress" bound over to keep the peace; some sympathizer can go her bail; and in a month she is in full sail in another quarter. If their "boarders" are not actually caught "soliciting"—overheard or seen improperly accosting men, and sometimes boys, in the immediate proximity of the policeman—these women may traverse the streets from sunset till midnight, cruising for customers, with complete safety from interference by the police. Persons who have had unfortunate association with them will not enter formal complaint against them except sometimes, where the victim has been robbed of watch or money, he hopes to recover by legal process. General society naturally evades the disagreeable task of ferreting them out. Unless the evil be made the subject of special legislation, by which it shall become the duty of conscientious officials and their coöperating agents to labor vigilantly and unremittingly for the suppression of the evils under consideration, no abatement need be anticipated. Many opponents of legalized interference with the business of prostitution insist that a medical examination of infected women, and public women, constantly liable to become infected with contagion, "*is defiling the cradle of humanity*;" but which is it that defiles this sacred "cradle?" The infection that makes it a source of poisonous pollution? or the examination that is to cleanse and purify? We hold that innocence, modesty, purity are sacred. We would guard them with religious care. But we would not confound them with the capriciousness of a public prostitute, who "hates" to have it discovered that she is a source of contagion. There is abundant evidence that whenever a confirmed strumpet thus simulates the air of injured virtue, it is but part of her practice, in which she is so thoroughly schooled. Unless compelled to submit to medical examination by their "boarding-house mistresses," this class, under the existing condition of prostitution, oppose and resist the examination that is to reveal their actual condition. In the case of the confirmed prostitute there is a predominating indifference to results. And unless there is a regulating arm that impels, they are never the subjects of conservative regulation.

Are opponents of intelligent, regulated inspection aware that the value and need of inspection is so well understood by some boarding mistresses, that, without any adequate qualification, they themselves examine the "girls" in their houses whom they suspect are diseased? So watchful are they over the pecuniary interests of the house, they do not run the risk of calling in

a physician to treat their diseased women, lest men, seeing a doctor attending, should suspect their danger and avoid the house. In order to maintain as large a patronage by men as possible, it is a fixed, abiding policy of women engaged in the pernicious business of prostitution, to prevent by every possible plan suspicions of existing danger.

We deprecate the self-desecration of womanhood involved in promiscuous sexual abandonment. We deprecate the causes that too often carry women of deficient discretion into the sphere of ill-fame. But in honor of the good and true women, to whom the world must look for sons and daughters, we must also confess that though "God has given to every woman the natural right to the sovereigaty over her own person," nevertheless, if a woman surrenders herself to public prostitution, she forfeits her rights to sanctity, and is not entitled to unrestrained privilege to spread moral and physical infection by the "sovereignty" of her person.

Hospital Reports.

BELLEVUE HOSPITAL MEDICAL COLLEGE, NEW YORK.

A CLINIC BY AUSTIN FLINT, M. D.,
Professor of Principles and Practice of Medicine.

Emphysema.

This patient's name is Thomas S., he is sixty three years of age; pursues the business of peddling; was admitted on the eighth of this month. Please note this fact, gentlemen, that he has had more or less cough since his childhood. About eighteen months ago he became much worse. Suffering for want of breath, and this difficulty has been increasing steadily, and now he is unable to take any kind of active exercise without suffering from marked dyspnœa. The cough has been violent and paroxysmal. The paroxysms of coughing are accompanied with congestion of the face, and frothy sputa. The appetite is poor, and he has lost a good deal in weight. He complains, then, of cough, dyspnœa, loss of appetite, and impairment of strength.

Well, here, gentlemen, are good data for forming a presumptive opinion, but, if I ever lead you to do that, it is simply for a kind of discipline, for it is not a good plan to pursue in the examination of patients. We should try to avoid forming any definite opinion in diagnosis until we get all the facts. But here the history is quite a characteristic one, and the diagnosis will not be difficult.

This is a case I have been looking for for some time. It is the first we have had this session. I call your attention to the appearance of the chest. Writers are accustomed to speak of the barrel-shaped chest. It is not a bad simile. You see at once what you have here, a projection of the anterior wall of the chest, which is not natural. We do not find it unless we meet with a case where pulmonary emphysema began early in life and continued.

I call your attention next to the manner of breathing. In the first place, you see that, while lying perfectly quiet, as he is now, there is labor in breathing. He does not breathe easily, comfortably. Then observe that the upper part of the chest remains quiet while he breathes, that what movement does take place takes place at the lower part of the chest and at the epigastrium. During inspiration the lower part of the chest is drawn inward, just the reverse of what should occur. You see, when he takes a deep inspiration, the chest wall is lifted up like the shell of a tortoise, as if it were one solid bony case, and the epigastrum is drawn in. These are characteristic visible signs of emphysema, with sufficient dilatation of the lungs to cause this deformity of the chest. Should he have a fit of coughing before leaving the amphitheatre, you will see that it is spasmodic, as stated in the history; one cough succeeding another too rapidly for full inspiration, so that the patient gets out of breath and suffers very much from dyspnœa, the face and neck becoming congested and swollen, and the prolabia not unfrequently becoming cyanosed. With the spasmodic paroxysms of coughing there is usually expectoration, which contains perhaps some mucus, but a good deal of serosity. This serosity contains air bubbles in abundance, so that it looks like soap-suds.

I will not dwell long on the signs obtained by percussion and auscultation, as we have considered them before. They can be obtained in cases where there is not as much deformity of the chest as exists here. You observe that his chest is dilated beyond the utmost limits of forced inspiration in health. That is an important fact as bearing on the mechanism of emphysema. It shows conclusively that in the production of emphysema, such as we have here, something more is required than the collapse of certain pulmonary lobules and the expansion of others to fill the space.

Pulmonary resonance is increased, vesiculo-tympanitic and higher in pitch, especially as we ascend. The tympanitic quality and pitch is a little more marked on the left side than on the right, showing that here is an illustration of the rule that the upper lobe of the left lungs becomes emphysematous to a greater degree than that of the right. A reason for this may be that in violent fits of coughing and strains upon the lungs from his labor, the left upper lobe is more compressed than the right in violent inspiratory acts, because the liver prevents so great force being exerted upon the right lobe by the inward movement at the lower part of the chest and at the epigastrium. There is feeble respiratory murmur on both sides, more marked on the left side, because there there is more emphysema. There is short inspiration and prolonged expiration, but this prolonged expiratory sound has the same quality and pitch as the expiratory sound of health. Please bear in mind, viz: that although there is prolonged expiration it does not differ in pitch and quality from that in health, and do not examine for bronchial or broncho-vesicular expiration, for where these exist there is a rise in pitch, and a tubular quality.

The heart is pushed below its normal position, on account of the increased volume of the lung at the left upper lobe.

Now, this patient has no œdema. When œdema occurs it is dependent upon the effect of the emphysema on the right side of the heart. Emphysema involves an obstacle in the pulmonary circulation; that obstacle leads to an overfilling of the right side of the heart; that leads to increased power of the right ventricle; that leads to hypertrophic enlargement of the right side; and that leads ultimately to dilatation. Then we have an obstacle affecting the systemic circulation, and the result of that is general dropsy, together with more or less cyanosis. Now, you see this patient's lips are of pretty good color, just a little dark, and he has no œdema. The history does not show that he has had asthma. It is a case of chronic bronchitis occurring early in life, persisting, and leading to emphysema which, in the great number of years that have expired, has reached the degree which you see here. If there were enough chronic bronchitis to lead to phthisis, in a case like this, it is difficult to answer why we do not have it, and yet we know that this condition antagonizes the occurrence of phthisis.

What is to be done in a case like this? What is the objective point of treatment? It is to diminish, if we can, the bronchitis; to improve his condition as respects that, as far as we can. This distention of the chest will never disappear: but if we can relieve the bronchitis, it will not be likely to increase, and it may diminish somewhat, perhaps, even considerably. We should, therefore, aside from certain palliative measures, employ remedies which are found by experience to exert a sanitary effect upon chronic bronchitis, as the iodide of potassium, the chloride of ammonium, the chloride of potassium, the balsamic remedies. It is possible a good deal of good may be effected by their use in this case.

Typhoid Fever.

Case 2.—The next case, gentlemen, is one of a good deal of interest. I hardly know how to manage it, because the record is so long. You will see why it is so, and why it is very desirable it should be so. The temperature has been taken hourly for several days, and it makes a great many details. But I will try to get the meat out of the nut. It is a case of typhoid fever which has been treated pretty vigorously with the wet sheet, and then with quinia.

The patient is a girl about fifteen years of age, and is now getting along very satisfactorily. She still presents some, but not as much as she did, of that dull, indifferent expression, which is strikingly marked in most cases of this fever.

Now, let us see what we can get out of the history, so far as regards the practical points. Bridget C., fifteen years of age, admitted on the fifth instant. A week before her admission she was taken ill. The first thing of which she complained was headache, and that was followed by a feeling of lassitude, loss of appetite, and vague pains.

On her admission, which was a week afterward, she complained of having pains all over, a general feeling of malaise, headache, weariness, loss of appetite, etc. She had no epistaxis or diarrhœa—an absence of two symptoms which are very frequently present, and which, therefore, possess diagnostic significance. But we have no difficulty in reaching the diagnosis in the absence of these. The face was flushed, the eyes suffused, the tongue coated white, red lips, sordes on the teeth, some pharyngitis. The patient's mother was admitted on the same day, in about the same condition.

On physical examination, there was right iliac tenderness and gurgling, but no tympanitis. Three rose-colored lenticular spots were found on the abdomen. Subsequently some more were found. The spleen was slightly enlarged.

Now we come to the temperature and treatment. On the 5th, which was the day of her admission, the temperature at 11 o'clock was 101.5°. She was ordered whisky, half an ounce every three hours, and a diet of milk and eggs. At 4 o'clock the temperature was 104.5°; at 4.45, 104.5°. Now she was placed in a wet sheet. By the wet sheet we mean enveloping the whole body in a sheet saturated with water at about a temperature of 80° F., first placing under the patient an India-rubber cloth, so as to protect the bed. Then the wet sheet, in which the patient is wrapped up, is sprinkled about every fifteen minutes with water, of about the same temperature. Now, that is applied as a substitute for the cold bath, and I believe it to be such. You see at once it is more easily managed, and is much more convenient and comfortable for the patient. Taking him out of bed and putting him into a bath in the condition in which he is, is very apt to excite a good deal of mental and nervous disturbance. Moreover, it is attended with a good deal of trouble. In this way, however, the wet sheet can be continued as long as desirable without any trouble.

At 4.45 the temperature was 104.5°, and the patient was put in the wet sheet. At 5 the temperature was 104°; at 6, 104.25°; at 7, 103.75°; at 8, 104.75°; at 9, 101.75°; and then the sheet was removed. She was in it from 4.45 to 9, the temperature having been reduced from 104.5° to 101.75°. At 11 P.M. the temperature had risen to 105.5° in the axilla. The difference between the temperature of the mouth and the axilla is from a half to a whole degree. She was again placed in the wet sheet. At 12, midnight, the temperature was 104.5°; at 1 A.M., 104.75°; at 5, 104°: at 6, 104.75°; and so on until two o'clock, the wet sheet being continued steadily until that time of the afternoon of the next day, when the temperature had fallen to 103.5°. This mode of employing water can be continued much longer than the bath. At 3 o'clock the temperature again rose to 105.25°. It was then thought best to give her a full dose of quinine as an antipyretic. She was given twenty grains at 3. At 4 P. M. the temperature was 105.75°, and she was again placed in the wet sheet. The sheet was removed at midnight, the temperature having fallen only to 104°. So both measures, the quinine and the wet sheet, failed to reduce her temperature much. She was delirous, and this, you know, belongs to the disease. From 1 o'clock A.M. to 8, on the 7th, the temperature varied from 104° to 106°. The tongue was uniformly red and very dry, and she fretted a good deal about being

placed in the wet sheet. She took nourishment well, and her general condition seemed to be good. During this entire day the wet sheet was not used, but at 1 P.M. she got ten grains of quinia. She had this day a loose, yellow colored stool, such as belongs to the disease. The temperature kept up all day; at 6 P.M. it was 104.25°. The pulse was only 84, illustrating what we see often enough, that although not infrequently the temperature and pulse correspond, often there is a marked discrepancy. Here was a pulse of only 84 while the temperature was varying from 104.5° to 106°. Nothing was done except to give the dose of quinia, having been a little discouraged in not getting the effect hoped for from the wet sheet. One reason why it was not applied was, that the patient shrunk from it; was uncomfortable; fretted; cried. As a substitute for it, it was ordered at 6 o'clock in the evening that the body be sponged. Now, we can effect a good deal by sponging the body, if it only be continued and thoroughly carried out, either having the whole body exposed and sponged, or sponging a portion of the body at a time, doing so not for a few minutes only, but for many hours, perhaps. Well, this was commenced at six o'clock, sponging first one extremity, then the other, then the body, and so on, with tepid water. Twenty grains of quinia were ordered to be given every six hours, the first being given at 6 o'clock, the temperature then being 104°. At 9, it was 103.5°; at 10, 103.25°; and so it went until 2 A.M., of the 8th, when it rose to 104°, and continued so until 7 P.M. when it fell to 103.75°; but at 12 M. she had received twenty grains of quinia, and the same amount at 6 P.M. At 8 P.M. the temperature was 103°; at 9, 104°; at 10, 101.75°. The patient was annoyed by the sponging. She had a slight cough, but no expectoration; the pulse was 96, and rather feeble; the carbonate of ammonia was now given, five grains every three hours. The sponging was continued pretty constantly for a couple of days now, although the temperature did not go up very high. On the 9th it went up as high as 104°, but only once, and continued so only an hour. The rest of the time it varied from 100° to 103°, being kept down, as we have reason to think, by the sponging. Now we come to the 11th. This day, at 1 A.M., the temperature was 100°; at 9 A.M., 100.75° in the axilla; at 10, 100°; at 11, 100.° Now, you see, she has almost a normal temperature. There is no diarrhœa, there is no tympanitis, the mental condition is improved, and she is apparently approaching convalescence.

She had epistaxis after coming into the hospital. Interesting points in the case are, the occurrence of the fever without epistaxis or diarrhœa during the forming stage, and with no marked diarrhœa during the progress of the disease; still, some of the stools have been liquid, and of the characteristic yellow color: then a higher temperature and not a proportionate increase in frequency of the pulse. Had we formed an idea of the height of the fever in this case by the pulse we should have made a mistake. We will see yet whether she goes on to perfect convalescence and recovery.

(Later. The patient completely recovered.)

Bright's Disease.

CASE 3.—Our next patient's name is M., 19 years of age, a seamstress, admitted the 27th ult. She began to cough about five months ago. Two months subsequently, while walking along the street, she slipped and fell, striking on her left side, and immediately began to raise blood. The quantity was small. For two weeks after the fall her sputa was stained with blood. She did not experience any embarrassment of respiration after the fall, but had pain and soreness in the right side. Since the cough began she has had occasional night sweats. She has lost in weight, her appetite is impaired. She entered the hospital complaining of cough, diminished appetite and strength, and night sweats. The physical examination showed prolonged and high-pitched expiration, the voice sounds more distinctly transmitted at the left apex, and, on physical examination yesterday, I found vocal resonance distinctly increased at the left summit, and râles present there occasionally, so that it appears to be clear enough that this patient has a small phthisical affection situated at the upper part of the left lobe.

But I have brought the patient before you for another reason. She was given cod liver oil and hydrocyanic acid. On the 30th ult. it was noted that she had night sweats, and that the hands and feet showed some œdema—not much. On the 3d inst. the patient was seized with a chill, followed by pain in the left side near the nipple. She had cough and orthopnœa; was suddenly seized with such difficulty of breathing that she was obliged to sit up in bed. The next day she had orthopnœa and pain in the side, and a cough, with a pinkish watery expectoration. The temperature was 101°, the pulse 120, the respirations 24. Examination showed œdema of the hands and lower extremity, and over both lungs posteriorly diminished fremitus, dullness on percussion, diminished vocal murmur, subcrepitant râles—a group of signs which clearly evinced pulmonary œdema.

What pathological connection should we suspect under those circumstances? There was no disease of the heart. We should, therefore, at once direct our attention to the kidneys, and, on examining the urine, it was found to be pale, clear, acid, of a specific gravity of 1.017, to contain traces of albumen, and small hyaline, fatty, and granular casts.

You can see, gentlemen, no appreciable œdema under her eyes to-day, and there is none of the feet, and the œdema of the lung has completely past away. Indeed, that more or less of it, passed away the day after its appearance. You observe, she presents no particularly morbid aspect. The point is this, gentlemen: this patient has disease of the kidneys (she has phthisis too), and yet, till œdema of the lungs and a little of the limbs and face was noticed, there was nothing to suggest the idea that she was suffering from renal disease.

Now, let us see what further facts can be obtained with regard to the urine. On the 4th inst. the amount of urine passed in the twenty-four hours was seventy-eight ounces; on the 5th, seventy-nine; on the 6th, forty; on the 7th,

thirty-eight: on the 8th, thirty-six; on the 9th, thirty-six; on the 10th, twelve ounces. Some perhaps was lost. The temperature has been normal several days. She complains of pain in the left side. She was placed upon a diuretic.

From this history what form of chronic disease of the kidney has she? I do not suppose any of you will hesitate much in answering that question. "The cirrhotic or contracted kidney." Yes, of the different forms of chronic disease of the kidneys, so far as we can judge from the symptoms, she has the contracted kidney. This is shown by the absence of œdema, except in a small degree, a very small quantity of albumen, the presence of casts, urine of rather low specific gravity and large in quantity, and the occurrence of pulmonary œdema.

The practical lesson that I would impress by this case is, that we should always make a thorough examination of the urine whenever we investigate it with reference to renal disease. Suppose we had examined the urine in this case only with reference to albumen, we would have said, here is only a small trace of albumen, which perhaps is due to some transient cause. This shows the importance of a microscopical examination. And here we have pulmonary œdema, whether it depend upon uræmia or not, we are not prepared to say; but in a case like this it is important to form an idea as to the amount of urea being eliminated, and it should be examined with reference to that fact. I see patients in consultation, and often, on asking if the urine has been examined, I am told it has been, that it contains albumen, but that is about all they know about it; sometimes they don't even examine for the specific gravity. The specific gravity and the quantity are the points. These give us the data by which we can judge whether the urea is being eliminated in sufficient quantity to relieve the patient from the danger of uræmia. I have not time to dwell upon this subject longer to-day, but you will recall the minor manifestation of uræmia as well as the graver. In this case the indications are to eliminate the urine in larger quantity than it is being passed at present, and so guard against another attack of pulmonary œdema, and further manifestations of renal disease.

Pneumonia.

Case 4.—This patient's name is Alexandra M., forty-five years of age, a domestic, a native of Canada, admitted on the 8th ult., having been ill two weeks. Her illness began with pain in the left side, with cough, no chill. On admission, she complained of cough, of dyspnœa, of pain in the left side, and of debility. The temperature was 101 in the morning, and 100 in the evening. On physical examination, there was found increased vocal fremitus, dullness, bronchial breathing, bronchophony, sub-crepitant and crepitant rales over the lower lobe of the left lung. Well, of course, we would say it was a case of pneumonia. The general condition of the patient was pretty good, and we did not have a chill in the previous history, but still we have the signs of consolidation affecting the lower lobe, and some of the members of the clinical class will recollect that this is the patient who gave us a good illustration of bronchial respiration and bronchophony, bronchophonic whisper. Well, her general condition was good, and it remained good, and she felt well enough to sit up. She was allowed to sit up, but still there were those signs. She came in on the 8th ult. There being very little increase of temperature, and the signs mentioned continued two or three weeks, and I illustrated to different sections of the clinical class those physical signs by this patient. Well, we began to say then, this cannot be pneumonia; it must be fibroid phthisis. And we rather settled down on that conclusion. Last Friday, a week ago to day, I took a section around to illustrate those physical signs in this patient, and to my surprise they had disappeared. She had not been examined for several days, and the signs of consolidation had in the meantime disappeared.

Now, what is the lesson? It is this. That in some cases of pneumonia (for no doubt it was a case of pneumonia) the consolidation of the lung continues, and leads us to think there is phthisis, but finally resolution takes place. So you will meet with cases where you will think there is pneumonia, and you will find several weeks elapse before resolution takes place. But resolution will at length take place. I shall never forget a patient who came into the hospital some years ago with consolidation at the upper lobe of one lung, and who was supposed to have phthisis. He remained in the hospital for some time, lying in his bed, attracting little attention, as he was supposed to have phthisis, until one day I was struck with the fact that he was looking better—very much better than one could expect of a patient with phthisis confined to bed, and on examining him, I found that consolidation had greatly diminished, that resolution was taking place, and that the patient had not phthisis, but pneumonia. He recovered, and shortly afterward enlisted and went into the army.

Hepatic Colic.

Case 5.—As we are lecturing on hepatic colic in the didactic course I will present you a patient with that affection, but we have not time to make extended remarks upon it. His name is Daniel, colored, a waiter, and he was admitted on the 8th inst. No previous history was obtained except that he had had three attacks similar to the one from which he is now suffering. The conjunctivæ show a moderate amount of jaundice. In the three attacks previous to this the prominent symptoms were severe pain in the right hypochondrium, radiating to the chest and right shoulder, tenderness over the liver, vomiting, and icterus or jaundice. Those are the salient points of the past attacks, and also of the one which he has had since he came into the hospital. The pain was paroxsymal, the paroxysms lasting an hour or more, as a rule, and occurring several times in the course of a week. The present attack began on the 8th inst., and was characterized by pain over the liver, which radiated into the thorax and into the right shoulder, tenderness in the right hypochondrium, icterus, constipation, anorexia, emesis, and some febrile movement. Several paroxysms have occurred

since his admission into the hospital, and during the intervals the right hypochondrium has been the seat of continuous dull pain and tenderness.

Editorial Department.

Periscope.

Febrifuges in Malarial Fever.

In a medical report on the health of the 3d Indian Regiment of Native Infantry during 1879, says the *British Medical Journal*, Surgeon T. E. Worgan gives some interesting observations on the results of his treatment of malarial fevers with various febrifuges, the large amount of that disease among the troops offering a favorable opportunity for testing the value of drugs. Quinine being a costly drug, few cases were treated primarily by it, and only such cases as were of formidable character; the fact that recurrences took place is not, therefore, to be wondered at. Carbolic acid, a drug which does not appear to have attracted great attention as an antiperiodic and antipyretic, yielded most encouraging results. That these results would have been still better, Surgeon Worgan is convinced, had he employed the drug from the first in the manner which experience subsequently pointed out. The doses, to be effectual, must be full and frequent; ten minims of the carbolic crystals to the ounce of water, and one and a half ounce of this mixture repeated six times during the day. No bad results were ever noticed under this treatment; no vomiting or dyspepsia, though slight relaxation of the bowels was occasionally experienced. If the smallest fullness or hardness of the pulse were noticeable, an ounce of this mixture, combined with a diaphoretic, was administered a similar number of times, the diaphoresis compelling absorption by diminishing the tension of the vessels. This plan was pursued whether the patient was in the paroxysm or entirely free from it, if the pulse seemed to indicate its advisability. Eighty-five injections of quinine were performed, but seldom as a primary treatment. The doses varied from ten to forty minims, more than twelve minims never being injected in one place. Three cases of abscess occurred, and chronic localized thickening of the cellular tissue invariably resulted. In one case, four grains in one spot produced a slough within four hours. Since these cases, even though assisted by the internal administration of "alkaloids," show only a proportion of about 33 per cent. of absolute success, and considering the pain and disagreeable results which may follow, Dr. Worgan does not think this measure will hold a very prominent position as a treatment, except in those severe forms of malarial fever where the stomach resents quinine, and rectal administration is objectionable. The cinchona alkaloids answered well in the milder forms of fever. Much of their failure is due to their nauseant properties, the dose being frequently vomited up five minutes after administration. That this property is less marked when administered as a draught than as any pill, seems certain. Another peculiarity in their action appears to depend on exposure to air, and their age. As each new tin waned, the dose had to be increased, to be again diminished on the opening of a fresh tin. Arsenic was frequently used as secondary to other drugs, and as such the results were satisfactory; seven drops well diluted did not appear to cause any inconvenience, though given when food could not have been present on the stomach. Salicine was administered in a few cases in which pyrexia was a marked symptom, with the effect of reducing the temperature, but exerting no appreciable influence over the recurrences.

A New Method of Treating Rectal Fistulæ.

Mr. H. A. Reeves writes to the *British Medical Journal*:—

About three months ago I tried a plan of operating in a case of fistula in ano, which I believe to be novel—if there be anything new—and as the result was very satisfactory and rapid. I venture to draw attention to it, although I have only one case, so far, to record. The fistula was about two and a half inches long, and was divided in the usual way; then all pseudo-membranous tissues and granulations were scraped away with a sharp scoop, and the ordinary narrow blunt-pointed bistoury buried for half its depth at the fibre of the fistula. Both surfaces of the wound being vivified and hemorrhage having ceased, three deep silver sutures were passed, entering the skin about a quarter of an inch from the edge of the wound, and, passing well beneath the floor of the fistula, were brought out at the same distance on the other side of the wound. The upper stitch ran through the coats of the rectum into the surrounding tissue. These stitches were removed a week after the operation (but might have been removed sooner) when the wound was soundly healed. The patient has been perfectly well since. I intend to give this plan an extensive trial, as it promises to considerably expedite the cure of suitable cases of rectal fistulæ, and to do away with the painful dressings which have to be resorted to in the common mode of treating such affections. The bowels should be well open by a purgative and enema before operating, and must be kept confined for about four days after the operation. All loose folds of skin about the fistulous track must be removed. I shall be glad if other surgeons will try this plan.

Amyl Nitrite as a Cardiac Stimulant.

Dr. Edward T. Reichert, of Newark, N. J., contributes to the New York *Medical Journal* for July, 1881, an article in which, from a critical consideration of the more important of the literature bearing upon the subject, as well as

from experimental data of his own, he argues that nitrite of amyl acts as a direct stimulant upon the heart. The author admits that the increased action of the heart under the influence of the drug may be due, to a certain extent, to its depressant effect upon the pneumogastrics, as shown by Filenhe, Mayer, Friedrich, Dugau, and Brunton; but he thinks that the deductions of the first three of these observers must be accepted with allowance, because of the very indirect way in which they sought to decide this action. Dugau, whose view closely coincides with Pick's (that there is a compensatory relation between the action of the heart and the condition of the vaso-motor system, so that when the vascular channels are open the heart will naturally beat faster to overcome the excessive drainage, and *vice versa*), was misled by not discriminating between the action of the drug on the vaso-motor system and its effect on the heart. With the action of the vaso-motor system practically abolished (as was accomplished in Brunton's experiments, in three of which he compressed the aorta below the diaphragm and divided the spinal cord, the disturbing influence of respiration and struggles on the animal's part being done away with by means of curare), any change in the arterial tension must be the result of direct cardiac action; and in all of Brunton's experiments there was a primary and marked rise of pressure, which equaled as much as a fifth of the normal. The nitrites affect the blood pressure in two ways—by stimulating the heart directly, and by depressing the vaso-motor system, especially the centres. They are direct stimulants of the heart, increasing the frequency of its action and the amount of work done in a given time. Clinical evidence supports this view; for, were it otherwise, the action of amyl in chloroform poisoning, in collapse and syncope, and in heart disease accompanied by paroxysms of distress due to a weakening of its action, would either be *nil*, or else it would even aggravate the symptoms.

Ophthalmia Neonatorum.

In the New York *Medical Journal*, Dr. Bull writes of the ophthalmia of newborn infants, dividing the affection into (1) purulent, (2) croupous or membranous, and (3) diphtheritic conjunctivitis. Recognizing the purulent form of the disease as due in the great majority of instances to inoculation with the muco purulent or purulent discharge from the mother's vagina during parturition, the practical question is one of prophylaxis: and to this end the care of the disease must be placed in the hands of the obstetrician and those of the nurse, and on them must rest the responsibility of the result. The prophylactic measures recommended by the writer are as follows: In all cases of vaginal discharge in parturient women, whether specific or not, the vagina should be carefully cleansed and disinfected repeatedly before parturition begins. As soon as the child is born the external surface and edges of the eyelids should be carefully cleansed with a one or two per cent. solution of carbolic acid, and then the conjunctival cul-de-sac washed out with some of the same solution, or with a saturated solution of boracic acid. This must be done by the attending physician, or by a skilled nurse under his supervision. The eyes of all newborn children should be carefully watched for the first week or ten days, and whenever any signs of an ordinary catarrhal conjunctivitis appear, the conjunctiva should be thoroughly brushed over with a solution of nitrate of silver, from two to five grains to the ounce of water. If the conjunctivitis has become purulent, and the case is one of real ophthalmia neonatorum, the child should, if possible, be isolated from all healthy infants, and have its own bath-tub. If this is not possible the diseased infant should be bathed *last*, and no sponges should be used, but only cloths, which can afterward be destroyed. If one eye only is affected, do not apply the hermetically-sealed bandage to the sound eye, but envelop the arms or hands of the baby, so as to prevent the secretion from being carried to the fellow eye, and lay the child upon the side corresponding to the diseased eye.

The most important feature in the treatment is enforced cleanliness. This requires constant attention and the frequent use of some soft cloths and plenty of water. The use of cold cloths, dipped in cold water or even iced water, and laid on the eyelids, must be regulated by the amount of swelling of the lids and heat of the parts. As soon as the lids can be everted, the proper treatment is a thorough application of nitrate of silver to the conjunctiva of the lid and retrotarsal fold, daily, and sometimes twice a day. If this is thoroughly done, a five-grain solution will in most cases suffice; but where there are profuse secretion and considerable swelling of the conjunctiva, a ten-grain solution becomes necessary. When, owing to marked hypertrophy of the papillary structure of the conjunctiva, a stronger caustic becomes necessary, it is better to discard solutions, and employ the lapis mitigatus (one part nitrate of silver to two parts of nitrate potassium), and neutralize its effect by a subsequent washing with a solution of common salt. It is well to employ a one grain solution of sulphate of atropia in a saturated solution of boracic acid in every case of purulent ophthalmia, as the great danger in this disease is purulent infiltration and perforation of the cornea. Should this infiltration occur at the centre of the cornea, the atropia should be instilled frequently, for, if perforation occurs, the dilatation of the pupil will prevent a large prolapse of the iris through the perforation. If the infiltration of the cornea, on the contrary, be at or near the margin, it is better to employ a two-grain solution of the sulphate of eserine, as thus an extensive prolapse of the iris may be prevented if the ulcer perforate. In all cases the cleansing and washing of the lids and conjunctiva should be done with a saturated solution of boracic acid, and the atropine and eserine should be dissolved in the same.

Chloral in the Treatment of Asthma.

Dr. G. L. Mackelcan, of Hamilton, Ont., in a paper read before the Ontario Medical Association, and published in the *Canada Lancet*, Aug. 1, 1881, says:—

Taking for a theoretical basis the idea that the attacks originate from some peripheral disturb-

ance of some branch or branches of the pneumogastric nerve, which is communicated to the nerve centre, and that the attack could be arrested by paralyzing the nerve centre, as it were, the paroxysm could be cut short, and if cut short, the habit would ultimately be broken up, I thought that chloral hydrate would have the desired effect. The first case that came under treatment was an old standing one of thirty years, of the cardiac variety. This old gentleman had been subject in the first years of the disease to violent periodical paroxysms, but latterly it had become almost continuous, so much so, indeed, that he had not lain down in bed for some months. The remedy was given in ʒj doses at first, as I presume it was by most of us, when it came into use. The dose was then gradually decreased until five grains, three times a day, were taken. The effect of the treatment was such that in a very short time he was greatly relieved of his asthma, and at the end of six months he was entirely free from it. He lived for ten years afterwards and never was troubled with it again, although living in the same neighborhood. He told me that he gave my prescription to others suffering from the same disease in his locality, and that it entirely relieved them.

The next cases treated were four members of the same family. I had treated the father for some time on the old plan that I had been accustomed to, but with only temporary relief. As soon as he began the new treatment with chloral hydrate he began to improve, and after three months he had no return of the disease. Some time afterwards the mother came for treatment for the same disease, and in her case I believe she never had a subsequent attack. About two years after the son and daughter came to be treated for the disease, and were well enough to discontinue the remedy, one in three and the other in six months.

The history of five more cases is given. Two of these were completely cured, while the remaining three were benefited. In conclusion the Doctor says, that with regard to the disease in young children, when the diagnosis is made out (which is not always easy), the effect of the treatment has been very remarkable. Four cases from three to ten years of age, treated by from six to twelve grains, have been completely relieved from any further attacks.

Physical and Therapeutical Action of Hyoscyamia.

Dr. G. C. Seguin, in an article on hyoscyamia as a depresso-motor, published in the *Archives of Medicine* for June, 1881, says that the experience of all observers with reference to the physiological and therapeutic effects of hyoscyamia, may be summed up as follows:—

1. It acts as a mydriatic, but whether more fully or longer than atropia remains to be settled.

2. When given in small doses it reduces the cardiac pulsations, increases arterial tension, and checks the loss of body heat. It also produces hallucinations and delirium. It may cause a fall of axillary temperature, and occasionally a rash.

3. In large doses it immediately increases the pulse-rate, produces a seeming paralysis or motor debility, and sleep.

4. Hyoscyamia is indicated in mania, restlessness, delusions of persecution, dementia with agitation and destructiveness, epileptic mania, insomnia, rapid action of the heart, epilepsy, (?) status epilepticus, chorea, paralysis agitans, hysterical spasms, tremor, neuralgia, rapid pulse, etc.

5. In mania and allied states it produces sleep as certainly, or even more certainly, than chloral, without any evil after effect, unless it be occasional gastric disorder.

6. In cases of delusions of persecution or of suspicion it has produced a positive cure.

7. In paralysis agitans it achieves what no other remedy ever has done, viz., arrested the movements for four hours or more without insensibility.

8. In the status epilepticus it shortens the attack materially; perhaps better than any other single remedy.

9. It is a diuretic of no mean power.

10. The curative power of hyoscyamia does not appear to be great. In some cases of insanity its use has been followed by recovery, but, as a rule, we must look upon it as a good narcotic, often speedier, more complete, and less objectionable than morphia and chloral hydrate.

11. In spasmodic diseases, so far, we can speak of hyoscyamia only as an ameliorating agent, or as a palliative.

I would suggest, lastly, that in cases of very acute chorea, where death is threatened by incessant motion, hyoscyamia, given hypodermically, may prove of benefit by securing muscular relaxation with certainty, thus allowing the patient to rest, and giving time for other remedies to act.

Tests for Ergot.

On this subject, Dr. Etienne Evetsky says, in an article on the physiological and therapeutical action of ergot, published in the New York *Medical Journal and Obstetrical Review* for August, 1881:—

Although, according to Bonjean, ergot loses its poisonous properties to a considerable extent if taken in bread, still this is the only means of poisoning, except when taken for medicinal purposes. The peculiar color and odor of flour and bread (according to Orfila, the latter has dark, violet-colored spots) are usually sufficient to reveal its presence. But, if its amount is not great, chemical manipulations will be required for its detection. The test of Winkler is old and unreliable, because, according to Dragendorff, caustic potassa generates trimethylamine with other substances also. It consists in mixing the suspected substance with the solution of KHO; this is heated, and a peculiar penetrating odor of herring is generated, indicating that ergot is present in a larger amount than 1.5 per cent. The test of Zinin, improved by Jacobi, is more reliable and delicate. The flour is repeatedly boiled with alcohol; it is filtered, and a little cold alcohol, previously acidulated with sulphuric acid, is added. The presence of ergot will be demonstrated by the appearance in a few minutes on the upper layer of fluid of a beautiful rose color, by the intensity of which we may judge with a certain degree of accuracy of the quantity of ergot. According to the report of the commission ap-

pointed by the Russian government in 1864, flour containing but one per cent. of ergot produces very dangerous symptoms, and the amount of it is frequently much greater. In the epidemic reported by Swjatlowsky, in *Vratsch*, Nos. 10 and 11, 1880, the flour contained seven per cent. of ergot.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"The Abortive Treatment of Pneumonia," is the subject of a paper read before the State Medical Association of Mississippi, by Dr. W. Y. Gadbury, of Yazoo City.

——Dr. L. Duncan Bulkley sends us, in a reprint from the *Archives of Dermatology*, vol. vii, No. 2, April, 1881, clinical illustrations of *favus* and its treatment by a new method of depilation.

——We have just received a pamphlet from Dr. C. J. Lundy, of Detroit, on "Tubercular Laryngitis and Laryngeal Phthisis," which was read before the Ann Arbor Medical and Surgical Soiety.

——A reprint from the Philadelphia *Medical Times*, June 4th, 1881, contains a paper on "Ether Deaths," by Dr. John B. Roberts, being a personal experience of four cases of death from anæsthetics.

——We have received, in pamphlet form, a very learned and quite lengthy treatise, entitled, "Observations with the Hæmacytometer upon the Globular Composition of the Blood and Milk," being the Cartwright prize essay, by Dr. Frederick P. Henry, of this city.

——From a large number of clinical observations, Dr. J. Edmondson Atkinson has been led to ask the question, "May Iodide of Potassium excite Bright's Disease?" The whole subject is discussed in a reprint from the *American Journal of Medical Sciences*, for July, 1881.

——Dr. Chas. A. Oliver, of this city, gives us the results of his studies on the "Comparative Action of Hydrobromate of Homatropine and of the Sulphate of Atropia, upon the Iris and Ciliary Muscles," in a paper published in the *American Journal of Medical Sciences*, for July, 1881, a reprint of which is now before us.

——Messrs. A. E. Wilde & Co., of Cincinnati, Ohio, have sent us the first four parts of their "Atlas of Gynæcology and Obstetrics," edited by Dr. A. Martin, Professor of Gynæcology at the University of Berlin. The work will appear in fifteen parts, each to contain four elegant plates and four pages of explanatory text. In all, the volume will contain 475 black and 37 colored illustrations, from the original designs of numerous European authorities. These are elegantly executed. The price is $1.00 per part, but no subscription will be received for less than the entire work.

BOOK NOTICES.

The Compend of Anatomy. For Use in the Dissecting Room and in Preparing for Examinations. By John B. Roberts, A.M., M.D., Lecturer on Anatomy and Operative Surgery in the Philadelphia School of Anatomy. Second Edition, Revised. Philadelphia: C. C. Roberts & Co., 1118 Arch Street, 1881. Cloth, 12mo, pp. 192. Price $1.25.

The rapid exhaustion of the first edition of this work during the brief period of only a few months, shows that it has proved a valuable aid to students of anatomy. In issuing a second edition the author has taken the opportunity of making such alterations and improvements as he has deemed advisable. A table of ossific centres has also been added to the chapter on bones. In other respects the book remains unchanged.

The Mother's Guide in the Management and Feeding of Infants. By John M. Keating, M.D, Lecturer on the Diseases of Children at the University of Pennsylvania, etc. Philadelphia: Henry C. Lea's Son & Co. 1881. Cloth, 12mo, pp. 118.

This book seems to be written expressly for the use of mothers among the well-to-do classes of society. The Doctor enters into the minutest details of the management of children, during the first three years of their existence, with great skill, and he shows such thorough familiarity with the subject as can only be acquired by years of careful observation. All through the work he insists on the avoidance of medicine except under the direction of the family physician, and in the few instances where he allows the mother to administer a few simple remedies, chiefly antacids, indications are so plainly given as not to be mistaken. In the case of convulsions, that carry off so many little ones in our cities during the hot summers, he lays down definite rules for what to do until the arrival of the physician, and these rules are so excellent that we feel sure they will be the means of saving many a life. The author has, in our opinion, struck the happy means of teaching the mother what is necessary for her to know and of withholding such knowledge as might be dangerous.

THE

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A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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THE SUBSCRIPTION PLAN IN WORKS OF SCIENCE.

Every physician ought to make the purchase of a number of new books every year a part of his regular expenditures. It is only as a reading profession that ours can claim to be a learned one. The physician who does not systemetically read the best new books does not fulfill his duty to his patients, nor will he prove an honor to his calling.

He should, however, be on his guard against wasting his money, as it is very easy to do in making miscellaneous purchases, especially when, on the faith of "Announcements" and "Prospectuses," he puts his name down for a work not yet printed, and often not yet written. There are grave doubts whether the application of all the subscription book canvasser's arts and tricks to force the sale of long rows of medical books, huge cyclopædias and whole libraries to the medical men of this country has done the profession much good. The plan on which such works are sold is a thoroughly wrong one for scientific works. Unless the purchaser "goes it blind" and takes the whole lot—and this he must do, remember, on the principle of buying a pig in a poke, or as boys swap knives, "unsight, unseen,"—he cannot get any portion of the set, no single volume which he may want. It is perfectly apparent that this is simply a publisher's dodge to force the purchaser to buy what he otherwise would not buy and does not want; it is a "trick of the trade" to sell unsalable wares; and is utterly out of place in scientific literature, where the buyer is supposed to know just what his own needs are.

Another reason why publishers like this way of selling is that the victim—we mean the "subscriber"—has no redress if he once writes his signature in the "canvassing book," but must take the whole thing, no matter how greatly he is disappointed in it, no matter how urgently he desires to spend the money for other purposes. How many offices are cluttered up with that verbose and unmanageable mass of garrulity known as "Ziemssen's Cyclopedia"? We venture to say three-fourths of the subscribers to it would have been glad to have dropped their subscriptions if they could; but no, they had signed the bond and had to take whatever stuff was delivered. Now the whole work is substantially worthless, for a second edition has appeared in Germany, with so many modifications and additions that the first is obsolete. We here remark, that in Germany none of these large works, appearing in many volumes, at different times, are "sold exclusively by subscription;" you can at any time buy any one of the series, separately, at an ordinary price. The German profession are too wide awake to be caught as is ours; or else the book trade over there is conducted on principles of greater equity.

Again, these big books, these Cyclopædias and Systems and Libraries, are not at all what the sensible physician wants. They cost too much money at the start, and cripple him for further investments. With the rapid progress of science five or six years, at most, superannuates a book; another and a revised edition comes out,

or some other writer prepares a treatise on the same subject, which rightfully claims precedence over its forerunners. It is far better for the buyer, with say a hundred dollars to spend on books, to lay it out in getting a number of separate treatises and monographs, any one of which will cost comparatively little to replace by the purchase of a new edition, than to spend the whole sum in one of these subscription series, all of which grow old and of which no new edition will be published, simply because the purchasers will be too smart to be caught twice in the same trap. Is anybody so wild as to suppose that the shrewd house which published Ziemssen's work contemplates a second edition of it?

There is also a lack of individuality in these big books; though the different parts are written by different hands, they are all licked into shape by one editor; they must all be of such a length as will fit into the general scheme; they must all have a similarity of treatment and presentation of the theme; considerations which the author of an independent treatise does not have to take into account, and which hem and cabin the contributors, often to their literary detriment, as more than one has acknowledged to us.

These are not all the objections to this method of catering for the mental wants of the profession, but they are enough, it seems to us, for the medical men of the United States to join in letting publishers know that henceforward the countenance and patronage of the profession will not be given to scientific works "published exclusively by subscription."

A SERIES OF PRIZE QUESTIONS.

The prize questions which are proposed by the various medical bodies throughout the world may be taken to indicate the points on which information is most desired, or subjects which, for their importance, deserve particular study, or those which merit special encouragement. For any of these reasons it is interesting to see what topics have been put forward, and we select a few for that purpose.

The Belgians are much given to proposing prize questions, and some of the amounts are well worth striving for, apart from the fame which the prize essayist obtains, the help it gives him in professional advancement, and the satisfaction he experiences in the consciousness of work well done.

The Royal Academy of Medicine of Brussels announces a prize, to be awarded in January, 1884, of eight thousands francs ($1600), for the best explanation of the pathology and therapeutics of the diseases of the nerve centres, especially epilepsy, illustrated by clinical data and experiments. If the essayist is successful in making a decided advance in the therapeutics of such diseases, if, for instance, he discovers a successful treatment for epilepsy, he is to receive in addition to the sum above stated a second sum of twenty-five thousand francs ($5000). This handsome amount has been placed in the hands of the Academy by a person who does not desire his name to appear.

Other prizes offered by the Academy are for essays on the questions:—

"What is the nature of the influence of innervation on the nutrition of tissues?"

"What part do living germs play in the etiology of diseases?"

"What effect does drying, as a means of preservation of plants used in medicine, exercise on their medicinal properties?"

All these subjects are to be studied in the light of original investigations and experiments.

Still another prize, especially designated as for *international* concurrence, is offered by the same body, for the best dissertation on the subject:—

"The value of spectral analysis for forensic medicine and sanitary science, exhibited by original experiments and investigations?"

The essays are to be sent in not later than the last day of December, 1882, and the prize is announced as 1200 francs.

Turning to Italy, we find an announcement of the Academy of Medicine of Turin, of a prize of 20,000 lire ($4000) for the best essay "On The Physio-Pathology of the Blood." This is the "Riberi Prize," and is open to the world, but

the essay must be either in the Italian, French or Latin tongue.

In Paris the Société de Chirurgie has lately announced three prizes for competition this year. The subjects are:—

"The remote results of Ovariotomy."

"The etiological rôle of contusions in the development of neoplasms."

"The history and theory of union by the first intention."

The second of these is perhaps the most generally interesting one, although the first is undoubtedly one of the active questions of the day.

In conclusion, we may add that in our own country, among other bodies, the American Neurological Association offers a prize of five hundred dollars, to be known as the "William A. Hammond Prize," and to be awarded at the meeting in June, 1882, to the author of the best essay on the "Functions of the Thalamus in Man," to be sent in by February 1st, 1882, and the Warren Prize Committee offer a premium of $400 for the best dissertation worthy of a prize, upon the following subject: "Chronic Bright's Disease (Parenchymatous and Interstitial Nephritis). The Nature and Mutual Relations of the Derangements in the Circulatory and Secretory Organs." Dissertations should be forwarded to the Resident Physician, Massachusetts General Hospital, Boston, on or before February 1st, 1883.

Notes and Comments.

Chloral in the First Stage of Labor.

Dr. B. Bribach, of St. Louis, in the St. Louis *Courier of Medicine and Collateral Sciences* for May, 1881, speaks strongly in favor of chloral as a safe and powerful agent to alleviate the distress of and to shorten the first stage of labor, He also believes that more extensive operations will prove that, besides this, it fills an indication of much greater import to the subsequent welfare of the mother, namely, to lessen the risk of laceration of the cervix.

During the last few months of his service on the lying-in floor of the Female Hospital, he gave chloral to the majority of parturient women, excepting only those cases, mostly multiparæ, with which the first stage was short and easy, and a few others where its use was contraindicated by existing heart lesions.

The mode of exhibiting the drug consisted in giving fifteen grains every half hour until the patient came under its full influence; in unusual rigidity of the os thirty grains were given as the initial dose. The total amount in each instance varied from thirty to seventy-five grains, forty-five grains being sufficient in the majority of cases. To a few patients thirty grains were given by enema, and he thinks that in the parturient state chloral acts even more promptly and satisfactorily when given by the rectum than it does when given by the mouth.

Its effect in modifying the dilating pains of the first stage, by rendering them less frequent and more effective, is marked, and the teasing, wearing sensation in the interval between the pains, with its suffering and the lamentations of the patient, subside, giving way to a state of peaceful somnolence.

This effect is often so very striking that the parturient process seems to be entirely suspended. Digital examination during the pains, however, shows the uterine contractions to have increased in efficacy, from the more powerful protrusion of the amnion and the rapid progress of the first stage.

No less marked is its effect on the os uteri, the functional rigidity of which it overcomes with wonderful rapidity.

Lacerated Cervix as a Cause of Tardy Labor.

Dr. George H. Rohé, of Baltimore, relates in the New York *Medical Journal and Obstetrical Review*, for August, 1881, two cases bearing on this subject. The first was that of a German lady, aged 28, and the mother of five children. Her labors had generally been easy. In October last she had consulted Prof. Erich on account of painful uterine symptoms which, upon examination, were found to be due to an extensive bilateral laceration of the cervix, but being in the fifth month of pregnancy, an operation for its relief was postponed. On the 6th of February Dr. Rohé was summoned to her, and on arriving at the house was told that she had suffered pretty severely from pains resembling labor pains for two days, and that they had been longer and coming on at shorter intervals. A digital examination revealed the os high up in the pelvis and dilated to the size of a half-dollar. The rim formed by the os was still thick and fleshy, and evidently in no condition for dilatation for some time to come. Severe pain was complained of when the os was touched by the examining fin-

ger. The Doctor directed thirty drops of deodorized tincture of opium to be given when the pains became severe, and counseled patience. He saw her at intervals until March 12th, when she was delivered of a well-developed, living male child. The pains had continued at intervals, being more or less severe, for the entire five weeks, yielding only temporarily to the above-mentioned doses of opium, or half drachm doses of chloral hydrate. By the 15th of March she had recovered from the effects of her labor, and suffered only moderately from the symptoms of cervical laceration. She had never been a sufferer from neuralgia.

The second case resembled the first in its general character. There was the same tenderness of the lacerated portion of the cervical ring, great suffering being elicited by its being touched. She had labor pains from the 21st of April until the 5th of May, when she was delivered of a well-developed female child. The Doctor states that having carefully examined the obstetrical and gynæcological literature accessible to him, he finds, with a single exception—Goodell—no mention of the relations between lacerated cervix and lingering labor.

The Treatment of Uterine Myoma by Ovariotomy.

Mr. Lawson Tait, in the *Annals of Anatomy and Surgery*, for June, 1881, discusses the relative merit of the treatment of uterine myoma, by enucleation, hysterotomy and ovariotomy. He says that myomata, which require surgical treatment from their mere size, are very rare, only two such cases having occurred in the author's practice, and in one of these he removed the tumor by abdominal section successfully, in the other unsuccessfully. Cases where the tumors press upon neighboring organs are numerous, but are generally relieved by pessaries; in one case only had he to remove it, and the result was successful. Hemorrhage is the most frequent condition demanding surgical interference, the use of ergot or the injection of astringent substances seldom producing more than temporary benefit, and the hemorrhage, far from ceasing in a large number of cases at the ordinary climateric period, as is generally supposed, the menstrual flow is on the contrary prolonged for a number of years beyond the ordinary climateric age, producing chronic anæmia and frequently proving fatal. The operation of enucleation, the author says, he will never undertake again. The removal of these tumors by abdominal section has yielded two recoveries out of six operations. In two more cases he attempted to enucleate from the abdomen, but had to desist, and both patients died. Ovariotomy has in the author's hand yielded much better results, about ninety per cent. recovering. The tumors rapidly diminish in size after the operation and the health improves.

The method of the performance of the operation is very simple. He makes the smallest possible incision, often barely two inches, and searches with his left fore and middle fingers for one ovary after the other. He does not remove one until he is satisfied he can remove both, and he has only once failed in doing so. The mesovarium is then transfixed with a hooked needle, and a loop of silk brought through. He then ties it by the special knot, which he introduced some time ago, under the name of the "Staffordshire knot," and which he has never found to slip. The ovaries are then cut off with scissors or knife, as is most convenient, and the wound closed. In one case he had to make a ten-inch incision, and pull a very large tumor right out of the abdomen before he could find the ovaries, which were down behind it. He had a great deal of difficulty in packing the tumor back into the abdomen, but the patient made an uninterrupted recovery, and the tumor was—at the time of writing, two months after the operation—less than it was at the time by at least one third, and the hemorrhage had not recurred.

Iodide of Potassium as a Cause of Bright's Disease.

In an article which appeared in the *American Journal of the Medical Sciences* for July, 1881, Prof. I. Edmondson Atkinson, of the University of Maryland, calls attention to the large proportion of cases treated for advanced syphilis that present, after death, evidences of marked kidney disease; and, in this connection, to the fact that syphilitic renal disorder in its characteristic lesion, the gumma, is comparatively rare, while the forms the most frequently encountered are not in themselves syphilitic. From a series of observations made upon seventy cases of late syphilis, of which nineteen presented evidences of renal alterations more or less grave, he comes to the conclusion that there is a relation existing between the administration of the iodide in these cases, and the appearance of mucous or hyaline casts and albuminuria, as in a number the abnormal elements gradually disappeared after the cessation of the remedy.

While he believes that the evil effects of the iodide of potassium are small and for the most part transitory, he thinks that the occurrence of

more severe alterations is not impossible, nay is probable, and that some individuals are more susceptible to these evil effects than others.

On the Etiology of Scurvy.

Dr. O. J. Coskery, of Baltimore, in a paper read before the Clinical Society of Maryland, and published in the *Maryland Medical Journal*, gives the history of two well marked cases of scurvy. Both patients, as far as could be learned, had lived upon good, nutritious food, containing the usual quantity of vegetables. The author believes, after a careful inquiry into the causes of scurvy, that an exclusive diet, though one of the chief causes, is not the only one, but that it may be produced by any depressing cause. This is a subject which merits further attention. We have long been of the opinion that invigorating exercises and amusements, singing, reading, etc., form valuable adjuvants in ship hygiene.

Ovariotomy of Milk Cows

In an excellent paper on milk, published in the New York *Medical Record*, August 6th, 1881, Dr. E. F. Brush recommends the removal of the ovaries from milk cows by the operation known as spaying. If this operation, says he, were more generally adopted by the owners of dairy cows, we would avoid many of the influences which affect the value of milk. If, after a cow has calved and the flow of milk has attained its normal condition, this operation were performed, we would avoid those conditions in the cow which have a deleterious effect on the milk, such as the recurrence of the sexual desire, pregnancy, and the like. A cow once spayed will continue to give milk during the remainder of her life.

Antiseptics as a Safeguard Against Puerperal Fever.

Dr. Jas. G. Hyndman, in a paper on the above subject, which was read before the Obstetrical Society of Cincinnati, April 14, 1881, and published in the *Obstetric Gazette* for May, states that during the past summer he had under his care, for a period of about three weeks, an unusually severe case of puerperal fever, in which catheterization was very frequently necessary. The discharge was profuse and of such very foul odor that disinfectant vaginal injections were daily necessitated. The fact that he had been engaged to attend another lady some time during this period, led him to make his ablutions far more thorough than might have been the case otherwise, using thymol in the proportion of three or four parts to the thousand of water. This removed from his hands all odor of the putrid discharges far more rapidly than would carbolic acid, and possessed the decided advantages over that substance of producing no irritation and of having itself a rather pleasing odor. At about the worst stage of his case of puerperal fever, he was called to attend the lady referred to. She had a normal labor, continuing several hours, and made a rapid recovery without the slightest manifestations of febrile disturbance. Within a few days of this time, while still in attendance upon both these patients, he was summoned by a midwife to deliver a retained placenta. Subsequent inquiry showed that this woman also recovered promptly after delivery.

Quite recently he has again had the opportunity of testing the disinfective power of this agent. He attended a case of natural labor within an hour after leaving a patient with facial erysipelas. The same precautions taken in the previous cases were here followed, and no unfavorable symptoms ensued.

He therefore speaks with confidence regarding the efficiency in such cases of immediate and thorough disinfection and antiseptic methods, believing that similar precautions, if generally conformed to by physicians, would very soon prove the inutility of the great sacrifice of practice, which should be our only alternative.

Special Reports.

NO. XV.—DERMATOLOGY.

(*Continued from page* 192).

The Anatomical Seat of the Fungus in Tinea Tonsurans.

Dr. A. R. Robinson, in a paper (New York *Medical Journal*) March, 1881, on this topic, gives the results of his studies for the past two years. In one case he excised a portion of skin, in such a way that part was affected by the disease, and part was normal skin. On studying sections, the fungus, consisting of spores and mycelia, the former more abundant than the latter, was found to be lodged, in some cases in the upper, in some in the lower layers. In the stratum corneum the greatest number was observed, where this structure surrounds the hair and forms parts of the internal root sheath, that is, from the neck of the hair to the free surface. In the rete Malpighii both spores and mycelial threads were present. The spores were either isolated, in groups or in rows. Rarely more than five or six were found in any group or row.

In the corium, the spores varied in quantity, but were disposed in the same general way already described. Their shapes were either round or cylindrical. In the subcutaneous tissue the spores were also found in great number, surrounding empty hair follicles, in fact, they were as plentiful as in the corneous layer.

Dr. Robinson would conclude that the anatomical seat of the fungus in this disorder differs in different cases. It may be seated only in the corneous layer and hair-shaft, or may extend into the subcutaneous tissue. Where a large number of hairs fall out entire, the fungus is seated deeper than when the hair is only stubbed.

This conclusion is not entirely in accord with the result obtained last year by Dr. Unna. This observer (*Vierteljahr. für Derm. und Syph.*, Heft 2, 3, 1880) ascertained, by examining sections of skin affected with favus, that the parasite is not found in the deeper living layers of the epidermis, but is limited to the horny cells. It passes from them to the internal root sheath of the hair, thence to the cuticula, and finally penetrates the shaft. The external root-sheath and the hair-bulb remain unaffected. Inflammatory cell exudation is found around the superficial blood vessels, and obstruction in the sweat ducts and hair follicles leads to the formation of cysts. Dr. Unna recommends the use of boracic acid and vinegar lotions in parasitic skin diseases.

Treatment of Tinea Tonsurans.

Tinea tonsurans, improperly called herpes tonsurans, says M. Besnier (*Jour. de Med. et de Chir. Pratiques*), and which should always be designated by the term tricophytis, from the parasite which causes it, is of so long duration and demands so long a treatment, with so many changes in the medicaments employed, that it is necessary to have many means to combat it at the disposition of the practitioner.

It must, however, be remembered that this affection tends, in the end, but after long duration, to spontaneous cure; therefore, no substances capable of determining alopecia or the formation of cicatrices should be used.

This is what may happen after applications of croton oil, either when pure or diluted with other substances; the pustules formed on the scalp induce, ulteriorly, the disappearance of the hair at the points they occupied.

In order to follow out these indications M. Besnier, in certain cases of tinea tonsurans, employs the following treatment:—

The head should be shaved, the scalp well washed with soap, morning and evening, and about the size of a nut of the following ointment applied over the surface:—

℞.	Ung. petrolei,	48 grams	
	Acid boracic,	1 gram	
	Sulphur sublimat.,	1 gram.	M.

M. Besnier has also experimented with the following ointment, recommended as a parasiticide by Malcolm Morris, of London:—

℞.	Thymol,	2 grams	
	Chloroform,	8 grams	
	Ol. olivæ,	24 grams.	M.

This preparation, more irritating than the other, may be used in the same way.

Herpes and Herpetism.

Probably the most eminent dermatologist of Spain is Dr. Don Jose Eugenio de Olavide. He has just published a work entitled *Lecciones sobre las Dermatoses Herpeticas*. In it he describes herpetism as a constitutional disease, only appearing as a cutaneous affection in the less grave of its manifestations. Its four periods are (1) acute musculo-cutaneous, (2) chronic circumscribed, (3) nervous, and (4) visceral. He also divides it into malignant herpes, benign, anomalous and mixed. As an internal remedy he has found *arsenic* to yield the best results in ordinary cases, and he believes that the good results obtained from this drug in various affections of the lungs and bronchial tubes are due to the fact that such affections are merely the manifestations of the herpetic dyscrasia. He has seen instances where herpetism has simulated, in all respects, true pulmonary tuberculosis.

Tar and the balsamic preparations are also valuable internal remedies, and he expresses his opinion that if we could administer tar as freely as we can apply it externally, we should find all herpetic diseases curable by this means.

In the last stages of herpetism the digestive organs are so weak that arsenic cannot be taken. For such cases quinine, the ferruginous tonics, and cicuta are to be our resources.

As for sulphur, so far from being useful in this disease, as some have maintained, it is highly prejudicial, the mistake having arisen from confounding herpetic with scrofulous and rheumatic diseases.

The topical treatment is spoken of with minuteness and appreciation.

Finally, we must give Dr. Olavide's classification of herpetic disease:—

First group:—

Erythema,
Roseola,
Urticaria.

Second group:—
Erysipelas,
Eczema simplex,
" impetiginoides,
" rubrum,
Herpes phlyctenoides,
Zona,
Pemphigus.

Third group:—
Lichen,
Prurigo.

Fourth group:—
Pityriasis rubra acuta,
" alba chronica,
Psoriasis.

Thus it will be seen that he embraces a large section of the dermatological domain under this head.

Lichen ruber.

In the *Deutsche Med. Wochenschrift*, Jan. 1881, Dr. H. KRÖBNER reports a well marked case of this affection, in which the subcutaneous injection of arsenic was followed by very rapid and permanent improvement. After the first few injections the itching ceased, and the patient slept well; the papules then became paler and flatter and ultimately disappeared. Five and a half months later no relapse had taken place.

Pathology and Treatment of Leprosy.

At a recent meeting of the Société Medicale des Hôpitaux, M. CORNIL made a communication on the pathological anatomy of leprosy, and stated that he had found a number of bacteria in portions of hypertrophied skin, which would become a source of contagion in the ulcerative stage of this disease.

M. LABBÉ said that he heard the statement with pleasure, as he had been treating a young leper with hypodermic injections of *carbolic acid*, on the hypothesis of the parasitic nature of the complaint. The improvement had been so great that he did not despair of curing him.

Medicinal Eruptions.

Cutaneous eruptions arising from the ingestion of medicinal agents have within the last year received special attention from VAN HARLINGEN, of Philadelphia, and MURRAY, of Baltimore, both of whom have collected and published much interesting matter on the subject. Additional evidence of various kinds has been brought forward since their articles, some of which we present:—

Chloral Eruption.—According to Dr. MARTINET, *Thèse de Paris*, this eruption is usually erythematous, not unlike that of scarlatina; more rarely it resembles urticaria or purpura. This erythema affects chiefly the face, neck, front of chest, extensor surface of the larger joints, back of the hands, feet, etc. It is apt to appear more particularly after food, or after indulgence in alcoholic liquors. Usually there is no fever, or any general indisposition. It is accompanied by dyspnœa and palpitation of the heart, sometimes of a very intense character. The eruption occurs only in those who are predisposed to it, and seems to be due to vasomotor paralysis.

Furunculosis from Condurango.—In the *Vierteljahrschrift für Dermatologie*, 1880, Dr. J. E. GUNTZ states that he observed furunculosis, associated in one case with acute acne of the face in 20 patients out of 1000 who were taking a strong decoction of condurango for syphilis.

Bromide eruption.—A single woman, aged 26, had taken (*Der Prakt. Arzt.*, in London *Medical Record*, February, 1881) large doses of bromide of potassium for two years as a remedy for epilepsy. For a year the fits had disappeared, but the patient became excessively weak and anæmic, with exaggerated leukæmia, and the subject of a skin affection. On both thighs, the mons veneris, the whole hypogastrium, and on both breasts, the skin was moist, abraded, and covered with warty growths, crusts and scabs. Recovery from all these symptoms followed after three or four weeks when the bromide was given up, but the epilepsy returned.

Iodide eruption.—The following case is reported in the *British Medical Journal* in May last:—

W. K., aged 30, contracted syphilis some time about Christmas last. He was treated for seven or eight weeks by his medical attendant at Coventry, developing during that period a severe attack of roseola and sore throat. At the end of this time, he was advised by a friend to take iodide of potassium in water. The quantity of the drug in each dose was four grains. About three hours after taking the first dose he experienced smarting and burning pains about the face, back, neck and arms, and soon observed a "raising up of a lot of hard lumps" in the localities named. He took no more of the medicine during the day; and by the following morning the "lumps" had entirely disappeared. He again took the medicine, which was followed during the next day by the same train of phenomena. This occurrence took place on several occasions afterwards, the rash invariably appearing whenever he resorted to his iodide of potassium.

Methods of Epilation.

A study of various depilatories is contributed to the *Archives of Dermatology*, April, 1881, by Dr. C. HEITZMANN. He tried introducing into the hair follicles tincture of iodine, carbonate of potash and caustic potash. He found that the

last mentioned, diluted with four parts of water, is, on being introduced to the bottom of the hair follicle, capable of destroying the papillæ of the hair under the symptoms of suppuration. The scars and pigmentation disappear after a few months. He adds the following specific directions for employing this method:—

Begin with a weaker solution of caustic potash (1 : 6 or 1 : 5) and watch the reaction. Suppuration may follow one and the same injury readily in one person, scarcely at all in another. Persons of a good, strong constitution bear the injection of a solution of caustic potash 1 : 4 without evil consequences. Have the solution made fresh for every operation, as decomposition, *i. e.*, formation of carbonate of potash, takes place very soon. Have the field of operation in a horizontal position, in order to control the amount of the injected liquid. Confine the drop to the hair follicle as much as possible, because spilling of the liquid produces dermatitis in the neighbor hood, which, however, is easily manageable with free application of cold cream. Run the needle obliquely into the skin, according to the direction of the hair follicle, and give it a free rotating motion, while the drop of the liquid is pressed into its depth. Slight hemorrhage may occur, but is stopped by the introduction of the liquid into the wound. Let the field of operation remain at rest so long as suppuration is going on. Free applications of cold cream are sufficient to mitigate the unpleasant consequences of the cauterization.

The following *depilatory pomade* is given in *La Presse Médicale*:—

℞.	Carbonate of soda,	1 drachm
	Quicklime,	½ drachm
	Charcoal powder,	8 grains
	Glycerine (neutral),	1 fl. drachm
	Lard,	7 drachms. M.

After applying this pomade to the affected parts for ten or twelve days the skin takes a rose tint, and the hairs may be drawn out without pain.

Pathology of Molluscum Contagiosum.

This topic was recently discussed before the Pathological Society, London, by Drs. A. and B. G. Morrison:—

The essential change in molluscum contagiosum is one of epithelial hypertrophy ending in degeneration. To understand where this begins and how it progresses, it is necessary to examine, in addition, the normal skin at a part fairly supplied with hair. The hair follicles of normal skin and from the external meatus, where they were found to be hypertrophied, and molluscum, alike possess a peripheral zone of cells derived from the rete mucosum. In the normal skin there are (1) hair follicles, and these are clearly of a piece with their sebaceous glands. There are also (2) deep interpapillary depressions, some of which may be the usual depressions unusually deep, and some are hair follicles which have atrophied and contain remains of hairs. There are also (3) epithelial processes passing down from the deep surface of the epithelium—evidently initial hair follicles. In the sebaceous gland of the external meatus of the ear, the changes observed are hypertrophy of the peripheral zone, both in its cellular and periplastic tissues. Towards the centre of the gland the hypertrophic cellular products degenerate and contain sebum globules, and at the very centre a cavity is produced by breaking down of the gland contents generally. The appearance of a hair follicle from this part, with its sebaceous glands and without its hair, is very similar to that of molluscum. In molluscum contagiosum there is also exaggerated proliferation of the peripheral epithelial cells, with progressive thickening of their periplasts. The cells contain a transparent material, apparently sebum, enlarge, and ultimately, at the interior of the "tumor," have a cuticular look, and break down on the edge of the central cavity. The "vacuoles" appear to be never empty spaces, but contain a translucent material; they are characteristic of all rapidly growing epithelium that the authors have seen. The "mollusc bodies" are the cells filled with this material, and therefore not specific either. The part first attacked is not the horizontal surface rete mucosum, but that forming the outer zone of a hair follicle with its sebaceous gland, or even more probably that belonging to one of the deep interpapillary crypts above mentioned. The cause at work would not seem to be necessarily a specific agent, but any irritant lodged as above said will set up the hypertrophic condition of molluscum contagiosum.

Eradication of Nævi.

For this and similar purposes the newly introduced *ethylate of sodium* is coming into use. In the *Lancet*, for February last, Dr. B. T. Richardson reports cases of nævus, tattoo and mother's marks, nasal polypus, ozæna, and lupus, in which good results followed the use of sodium ethylate. The author also finds that there are many minor uses to which the ethylate can be put, such as the removal of warts, the destruction of small melanotic growths, ringworm, and hemorrhoids. As he has become more accustomed to its use, Dr. Richardson prefers to apply the remedy with a camel's hair brush instead of a glass rod, as at first recommended. When the solution is used in the form of spray, it should be diluted with absolute alcohol, sp. gr. .795, and sprayed through a Seigle's disperser; the operator being careful not to inhale the vapor himself, as it may produce soreness and irritation of the throat. To relieve the pain that is connected with the application of the ethylate, an alcoholic solution of opium may be added with good effect.

A method of applying *nitric acid* to nævi has been described by Dr. Speirs, in the *Practitioner*. He had the care of a child with a capillary nævus about the size of a hazlenut on the left

cheek. He was puzzled for a safe plan to apply the acid, and goes on to say:—

The following mode, however, proved highly satisfactory, and besides was easy of application. I took an ordinary two-ounce vial, selecting one with as wide a mouth as possible. Having broken off the body close to the neck, I inverted the latter over the nævus, pressing the rim of the glass firmly down upon the skin. This had the effect of forcing the tumor well up into the neck of the vial; and when the acid was applied by means of a pipette. it acted freely upon the whole surface of the nævus. Before removing the vial neck I carefully mopped out all excess of acid with some cotton wool on a probe. I then had the satisfaction of beholding a well-defined circular slough, rather depressed, but with clean cut edges, as if a punch had been used. The child suffered very little pain, and was easily pacified by being put to the breast. The action of the acid was found to have been entirely confined to the tumor, which was completely obliterated. No unnecessary loss of tissue took place, and consequently no cicatricial contraction or distortion of the eyelid.

It is now twelve months since the operation was performed, and the scar is scarcely perceptible, only becoming slightly crimson when the child cries.

The value of *electrolysis* in such cases, and especially where the nævus is on the eyelid, is well set forth in Prof. Knapp's *Archives of Ophthalmology*, March, 1881, by Dr. A. Nieder. He relates several cases. In two of them a tumor consisting of large veins exerted such a pressure on the upper eyelids that the eyes could not be opened. In all instances a complete cure was effected without any untoward symptoms.

Another plan is by *vaccination*. Last April, M. Constantin Paul communicated to the Société Médicale des Hôpitaux the case of a child who had had four large erectile tumors occupying a fourth of the cranium surface, and in whom he obtained a complete cure by vaccination. He spread vaccine over the surface of the tumor, and then made scarifications. A large quantity of vaccine is required, and therefore calf-lymph must be used.

The plan by *bandaging* is not always safe. At a recent meeting of the Clinical Society of London, Mr. T. Smith showed a child in whom one leg was the site of extensive nævoid enlargement. Mr. Smith described three somewhat similar cases. One he had treated by bandaging, which induced a red and painful state of the limb, followed by weakness and death. The skin and subcutaneous tissues were much hypertrophied, and the cellular tissue of the pelvis was invaded by the nævoid growth. A second case was that of a young lady, in good circumstances; the hypertrophy of the limb was very great, but she improved under the better home treatment she enjoyed than was usual in the more dependent classes of society. In the case exhibited, bandaging had been first attempted, but the child's rapidly deteriorating health recalled the experiences formerly gathered under similar circumstances, and an elastic stocking had replaced the bandage, with marked benefit to the patient.

(To be Continued.)

Correspondence.

Recovery from a Gunshot Wound in the Abdomen.

Ed. Med. and Surg. Reporter:—

The general interest attached to gunshot wounds at present, by the attempt on President Garfield's life, induces me to report the following:—

July 4th, 1877. Harry W. B., 7 years and 3 months old, a delicate, nervous boy, was one of a crowd of eight or ten boys, from 6 to 12 years of age, who gathered together on Smith street to celebrate the Fourth with a toy cannon. The owner had surreptitiously added small gravel to the load. All were seated on the ground behind the cannon except the owner and his assistant—the cannon pointing innocently to the centre of the street. But as soon as it was fired, it whirled half way round, and hit my patient in the left lower jaw, near the mental process, where it left a blue line and did no further damage, and immediately above the crest of the left ilium. Both places bled freely. This happened about 9 A.M. Harry was frightened nearly to death for an hour, but feeling no pain whatever from either wound, he stole out of the house, and celebrated until 4 o'clock in the afternoon. I saw him an hour afterward. The hole made in the jaw, as well as the one over the hip, is small. My probe at the hip is lost in the tissues, and will not enter more than two inches. The left iliac space is tender to touch and upon motion. A narrow band of pain runs in a diagonal line from the wound on the hip to, and ending in a spot about one and one half inches in diameter to the right of, the umbilicus. I tell the mother to bathe the wound freely in dilute carbolic acid water, keep the boy perfectly quiet for several days, and be prepared for any sudden outburst of pain and inflammation.

July 5th, 9 A.M. Harry is up and dressed. Vomited three times during the night, and complains of a little soreness through the umbilicus. To keep him in doors, and if pain continues, to poultice with linseed meal. I hear no more from him until five days later. In the meantime he eats, sleeps, plays, and has all his functions in as good working order as any well boy could wish.

July 10th, 12 noon. The messenger who called me was out of breath, having run all the way, saying that Harry was dying. I find him with his knees drawn tightly upon his abdomen, lying on his right side, but almost kneeling upon the bed; his screams are terrific. Has been having short seasons of "belly ache" across the umbilicus, and in a line running to the left hip. These

began before breakfast time. Vomited several times during the night and last evening. Bowels rather constipated. Urine scant, high colored. Tongue has thick, white coat. Whole surface cold and mottled in appearance, hands and feet clammy. Has not allowed anything to touch his abdomen, and consequently no poultice has been applied. I press quite forcibly upon his bowels, but give him no extra pain. He is so restless that I cannot possibly place the thermometer, nor can I count the respirations because of his crying and screaming, a continuous wail. Pulse 127 and variable. While a light linseed meal poultice is being made, I apply chloroform from the umbilicus to the hip, only to make him scream louder. I give him solution of morphia twenty drops at once, per oris, and thirty drops per rectum, and leave four Dover's powders of two and a-half grains each, one to be given every two hours, if necessary.

July 10th, 7 P.M. Dr. Wm. E. Clark, a surgeon of large experience in gunshot wounds, sees Harry with me. "Not one chance in ten, but narcotize," was his counsel, as he sorrowfully shakes his head.

July 11th, 9 A.M. Harry bounds from one part of the bed to another, keeping his knee and elbow position, and screaming "mine belly, oh, mine belly," at the top of his voice, which is heard fully a block away. Pulse 130, with hardly an interval between the beats, and variable. Great thirst, and intolerable itching from the opiates. All the symptoms are worse. Eleven stools since midnight, and vomited several times slightly. Had severe nose bleed, followed by throwing up large pieces of coagulated blood. Give him eight grains of hydrate chloral every two hours (the opiate having given out). Continue poultice with laudanum, water, beef tea or boiled milk, at regular intervals.

July 11th, 7 P.M. Worse. Gave in addition to the eight grain chloral every two hours, one-eighth grains morphia every two hours, alternating them.

July 12th, 9 A.M. No rest during the night for himself nor for the neighborhood. Tongue covered with thick, brownish fur, the edge and extreme tip being clean. Nausea. Bowels quiet. Pulse from 130 to 135. Cannot place thermometer nor count respirations. Skin not uncomfortably hot to the touch. A space, including the umbilicus, of about one and a half inches in diameter covers the burden of pain. Increase the morphia to one-fourth grain every two hours, the chloral remaining eight grains. Position still the knee and elbow.

July 12th, 7 P.M. Dr. Wm. E. Clark again sees him. Pulse too quick to count, bounding, beats running into each other. Umbilicus pouts slightly. Has changed his position, so that he lies with his thighs still strongly flexed on his left side. Respiration short and labored; has been getting shorter for the last twenty-four hours. Abdominal muscles not in use, but the shoulders are lifted with each inspiration. Eyes naturally large, are very large and receding far into their sockets. Muttering and picking his face and bedclothes. "Not one chance in ten," again says Dr. Clark.

July 12th, 10 P.M. Patient is worse; throws himself and wails piteously, "mine belly, mine belly." Bowels moved considerably at three different times since 7 P.M. Stop beef tea. Give him water in limited quantity, and ½ grain morphia every hour, together with 10 grains of chloral, until quiet.

July 13th, 6 A.M. Worse: continue.

7 P.M. Pulse 160. Continue.

10 P.M. Harry has persisted in screaming without an interval from the time I left, at 7 P.M. I ordered a quick hot sponge bath, change of poultice, and with an extra dose of morphia and chloral, he rested well for nearly four hours, screaming, however, whenever I tried to leave him or take my hand from him. Becoming restless at 3 A.M., July 14th, I ordered a fresh cup of two-thirds strong table tea and one third milk, which he drank with relish, and sank at once into a sound sleep until 10 A.M. At this hour his pulse is 140. Tongue still covered with brown fur; and now begins another season of pain. But I feel that he is so much better that I only give him ten grains chloral every four hours, alternating it with ½ grain morphia every four hours.

July 14th, 6 P.M. Rested comfortably from 11 A.M. Pulse 132 to 136, with distinct beats. Temperature 99. Respirations, 40. Tongue cleaning at the root. Has taken three cups of milked tea, with benefit. Is breathing deep and with abdominal muscles; shoulders quiet. Rolled over on his back to sleep, with both legs extended.

July 14th, 9.30 P.M. Father calls, in consternation, with the report that Harry had had two large stools, with renewed pain and suffering. Give him ½ grain morphia every hour, alternating with 10 grains chloral every hour until quiet.

July 15th, 7 A.M. Slept well all night. Boy feels fresh and rested, greets me with a smile, if one can smile who is so emaciated. Wants a "big dinner and a pail of water to drink." Had two more stools, each with about one tablespoonful of pus; has frequent discharges of wind. Pulse 110. Order a full quick sponge bath, with hard soap, iced tea without milk, toast and small piece of steak.

July 15th, evening. Cross, nausea and pain in bowels, pulse 112. Confine him to boiled milk and dry toast. Stop opiates.

July 16th, 5 A.M. Fell out of bed at midnight, which made the old pain through the umbilicus return. Pulse 120, and thighs flexed upon abdomen. Fresh poultice, with laudanum, 10 grains of chloral every hour until relieved.

July 16th, 3 P.M. Slept most of the time since morning. Pulse 112, regular. Continue.

July 17th, 9 A.M. Pulse 100. Temperature 98½. Tongue two-thirds clean. To eat moderately, but to confine himself to tea without milk, or boiled milk, toast, crackers, small piece of steak once a day.

July 18th, 9 A.M. Vomited yesterday several times a glairy substance with several pieces of coagulated blood the "size of house-fly." Continue diet, and 5 grains of chloral every three hours.

July 20th. Some nausea and vomiting. Sleeps four hours at a time.

July 23d. Wants to get up. Is very weak and reduced to a shadow. Still uses poultice. Pulse 92. Has in addition one egg and one baked potatoe daily. To eat three regular full meals daily, and a small lunch between if he needs it. Stop all medicine.

July 28th. Feels well and eats well. No soreness whatever in abdomen. Both wounds are healed up. Bowels and kidneys normal. Pulse 87. May gradually resume his old habits. To wear flannel bandage and flannel shirt as extra clothing, also shoes and stockings.

July 30th. Cannot sit up more than one hour a day. Discharged convalescent.

It is now four years since he was shot; for the past two years he has lived with his parents in the country. His health is excellent, but three or four times every year he has seasons of the old "belly-ache," as the result of carelessness. He cannot safely go barefoot, nor can he leave off his flannel shirt, even in the hottest weather, nor chill his feet in winter, without suffering greatly from the exposure. ODELIA BLINN, M.D.

Chicago, Ill.

Treatment of Malarial Fever.

ED. MED. AND SURG. REPORTER:—

Having lived for years on the banks of the Mississippi river, where intermittent and remittent fevers are the most constant maladies the physician has to combat, I will give my treatment in the chronic forms of this disease, in connection with enlargement of the spleen; and where it has been persistently adhered to for five or six weeks, I cannot record a single failure.

℞.	Sulphate quinine,	ʒj
	Crys. iodine,	gr. xv
	Ipecac pow.,	gr. xx.

Triturate the iodine; add the ipecac and quinine, triturating the combination well; divide into forty pills.

SIG.—One pill half hour before each meal.

I give the following prescription in connection with the above, to relieve the visceral obstruction and engorgement:—

℞.	Fluid ext. mandrake,		
	Fluid ext. leptandrin,		
	Fluid ext. stillingia,	āā	ʒj
	Whisky,		ʒ ij. M.

SIG.—Teaspoonful after each meal.

It will be necessary to check the paroxysm with an antiperiodic before commencing the above treatment. In very obstinate cases, where the disease is of long standing and the spleen is very much enlarged and indurated, an application of the comp. iodine ointment every other day will facilitate the reduction of this organ.

W. L. BELL, M.D.

Randolph, Tenn., Aug. 2d, 1881.

Prolapsus Uteri Treated by the Rubber Supporter.

ED. MED. AND SURG. REPORTER:—

I should like to report very briefly a case I have had under my care, and to point out a means of relief which I think should be more widely known by the profession. I was called to see Mrs. C., a married woman, age 41 years, in September, 1880. I found her suffering from prolapsus uteri which she had been afflicted with for over a year: had been treated by a number of physicians during that time, but without success. I obtained a Staufer's Economy Supporter, through the MEDICAL AND SURGICAL REPORTER office, with directions how to apply it. My patient at first derived little benefit from it. I sent her to New York to see a distinguished specialist, and he diagnosed it to be a case of prolapsus uteri, with chronic catarrh of the bowels. He advised me to continue the use of the supporter.

I subsequently obtained a loan of an additional instrument, direct from the manufacturer, to alternate and assist the former; this, together with his instructions, led to the most satisfactory success, so that my patient is enabled to do all of her household labors without any difficulty.

As the liberality of the manufacturer, in alternating instruments, enables any physician to obtain one that will fit any case, I am satisfied that if other physicians would pursue the same course, most, if not all, the difficult cases, of which many are bedridden and helpless, might be relieved. S. A. KEMP, M.D.

Callicoon, N. Y.

NEWS AND MISCELLANY.

Sanitary Statistics of Jews.

At the close of an article in the *Revue Scientifique*, May 14, a writer says:—

We believe that we have been able to show that nearly everywhere the Jews enjoy the following physiological immunities, when compared with the inhabitants of the countries in which they are established:—1. Their general fecundity (the relation of births to population) is less. 2. According to locality, their marriages are more or less fertile, but everywhere they preserve a larger number of their children. 3. They have much fewer illegitimate births and infants born dead. 4. The proportion of male births is sensibly higher. 5 Their mortality is less, and their mean life is longer. 6. Their increase, by the preponderance of births over deaths, is more rapid. 7. If they do not completely escape contagious diseases, they are less severely affected by them. 8. They are protected from certain diseases, such as pulmonary phthisis and scrofula. 9. They become acclimatized and reproductive under every latitude.

These immunities resist the generally miserable condition which all observers attribute to them, as they do the frequency of their consanguineous marriages and their sojourn in cities, remote from the salutary influences of rural life enjoyed by the majority of the other inhabitants. What can be the causes of these privileges? Must we regard them, with a large number of authors, as the result of a superior vitality inherent to the race, which has been preserved intact through ages, and in spite of the differences of climates, in consequence of an almost complete absence of crossing? Must we seek these only in the persevering observation of the laws of hygiene laid down in Deuteronomy? But these rules were

only applicable to the climate under which the ancient Israelites lived, whether in Judæa, or in Egypt during the captivity. Or should we attribute them, first, to the salutary influence of marriage, which Jews contract at a less advanced age than Christians, and also to their following the less fatiguing occupations, and which are but little exposed to accidents? Can we admit, also, that they profit by the beneficial hygienic effects of the spirit of order and economy, of regularity in habits and moderation in tastes, in the relative severity of their manners and the completely private and family life which many observers attribute to them? Finally, are we to admit with others that their state of misery is only in appearance, and that, in reality, their well-being is generally superior to that of the population amidst which they live? All these hypotheses are admissible.

On Supposed Third Sets of Teeth.

Professor Owen writes on this subject, in the July number of the *Journal of the British Dental Association*:—

Teeth are organs that, as a rule, have a term of existence more limited than that of the organism of which they form a part. In many of the lower vertebrates they are shed very soon after they are completed and in use, and are as quickly replaced by others. In the mammalia, however, there is but one succession of teeth naturally shed; but, though the successors of the so-called "milk teeth" last long enough to acquire the title of "permanent," they are rarely retained to a very advanced age. There is, however, a belief entertained by many, of the occasional acquisition of a third set in human centenarians. Thus it is recorded of the Countess of Desmond, that, not many years before her death, which is said to have occurred at the age of 140 years, "she had all her teeth renewed." I was led into a discussion on this point by a worthy clergyman, at the house of a friend whom I was visiting, and to my skepticism as to the alleged age and third set of teeth of the old Countess, he replied that there then lived in his parish an old woman alleged to have passed her hundredth year, who was actually then cutting her third set of teeth. I rejoiced at this instance. I had long been convinced that actual phenomena had suggested the statement, but that the nature of these had been misinterpreted, and I deemed myself most fortunate in having an opportunity of testing the matter. The following morning I was driven to the old woman's cabin. It was in the north of Ireland, and she was sitting crouching over her peat fire, a typical example of human decay. To the shouts of her pastor, the deaf old crone replied by pulling down her skinny lip and exposing the side of her lower jaw, from which there projected through the gum the blackened stump of a tooth, the crown of which had gone many years before. The absorption of the gums consequent on the edentulous state of the jaw in senility, had brought to light this remnant of a long lost tooth. Other stumps of teeth, of which the loss of the decayed crown had been forgotten, might in like manner appear through the shrinkage and absorption of the senile jaw. And this I take to be the true ground of the allegations as to the acquisition, in extreme old age, of a third set of veritable teeth.

"Pow Wow Doctors."

Few people appreciate the amount of superstition still rife in this enlightened country. We recently came across a description of a "pow wow" Doctor, who resides not a hundred miles from Easton, Pa. We quote part of it, as we personally know it to be substantially correct:—

"The only schooling 'Doctor W.' ever received for the 'medical profession' he acquired by a long and varied experience as captain of a gravel boat and bank boss on the canal, from which he stepped to the arduous and responsible position he now fills, and in which he has met with such success as will well enable him to keep the wolf from his own door, at least, as long as he lives.

"To show to what an extent superstition still sways the minds of men, it may be stated that in these days of railroads and telegraphs, and of general enlightenment, the average monthly attendance of patients who call for the professional services of Dr. W. on the first Friday after new moon is *about* 300. Some months there are as many as 500, at other times smaller numbers. Many, with less faith in the moon's influence, but with a lingering notion that there may be some virtue in the Doctor's methods, go between times to his house, to consult him in reference to their ailments. Those who have been at his village on 'moon' days say it is sometimes so crowded with vehicles of all kinds on those occasions, that one 'not to the manor born' would be apt to imagine that nothing less than a circus, a batallion, or some other equally important event had drawn together so many conveyances. Many go by rail, traveling, in some instances, we are assured, hundreds of miles to reach the place."

Antiseptic Ovariotomy.

Professor C. J. Ask, of Lund, in Sweden, contributes to the recently published number of the *Nordiskt Mediciniskt Arkiv* a paper on Ovariotomy. He had had thirty cases, of which seven were operated on without antiseptics, before July 1877; in the remaining twenty-three cases antiseptic measures were adopted. Of the seven cases in the first group, two died; while in the twenty-three antiseptic cases there were only three deaths. In the last twelve cases, Dr. Ask has not had one death.

Night Calls and a Jealous Wife.

A contemporary tells of a physician at Shelbyville, Ind., who is sueing for a divorce from his wife on the ground of cruel and inhuman treatment. Having a large practice, he is frequently called out at night. His wife, being jealous, refused to believe that all his absences from home were professional, and demanded that he should stay in of nights. He said his patients would not stand neglect. Then she adopted the plan of taking poison whenever he had a night call, thus compelling him to remain and doctor her.

She swallowed a deadly drug in this way several times, and her life was saved with difficulty, The husband claims that such conduct is a just cause for divorce.

Impressions of Esmarch.

A correspondent of an English journal, who lately visited the Hospital of Prof. Esmarch, writes:—

"What impressed us most during our stay was the earnest, almost chivalrous, devotion to the advancement of surgical science shown by the Professor and all his staff. There is no improvement or new principle of practice advocated by any member of the profession, in any part of the world, that is not canvassed here, and, if worth it, speedily adopted by Professor Esmarch; for, like the clerk of Oxenford, in Chaucer,

'Gladly wolde he lerne, and gladly teche.'"

Statistics of Paris.

The weekly mortality of Paris is within a small fraction of 30 per 1000 annually. A French contemporary states that the number of applications for admission to the Paris hospitals is just now very considerable. The prevailing disorders are fevers and smallpox. It has been found necessary to place as many as ten hammocks in some of the wards, till the other beds became vacant, either by the cure or the death of the patients occupying them. Thus, although there are numerous hospitals in Paris, they no longer suffice for the needs of the population. There is a talk of building two more.

He Came to Brighten the Home of the Aged.

Dr. John J. Taylor, of Streator, Ill., states in the Chicago *Medical Journal and Examiner* for August, 1881, that on April 17 he delivered Mrs. Rebecca Denning of an eleven-pound boy—full time. Mrs. D. is a native of Clay county, Indiana, where she was born the 13th of January, 1827, and consequently was fifty-four years, three months and four days old at the time of her last delivery. She is the mother of thirteen children, and is a large women, weighing about 200 pounds, of a sanguine, lymphatic temperament. Mr. John Denning, her husband, is sixty-four years past, hale and active, physically and mentally.

The International Medical Congress

Closed its session in London last week, after a highly successful series of meetings. Both in a scientific and social respect it fully met the expectation of delegates. The number of these was not far from 2000. The Proceedings were of great importance, and abstracts of them will appear in the REPORTER as soon as our mail advices from England reach us.

American Dermatological Association.

The Fifth Annual Meeting of this Association will be held in Newport, R. I., on August 30th and 31st, and September 1st

ARTHUR VAN HARLINGEN, M.D., *Secretary.*

Items.

Correction.—We should have credited the discussion on the sphygmograph, p. 108, to the St. Louis *Courier of Medicine*, instead of the St. Louis *Medical Journal.*

—The so-called magnetizer, Hansen, whose biological and hypnotical *séances* before the Medical Societies of Austria and Prussia have caused much interest, and have been investigated by the local medical societies, has been prohibited from giving public *séances*, on the ground that his displays are of a physiological character, likely to be injurious to the persons acting as mediums.

OBITUARY NOTICES.

Dr. T. H. Laidley, a well known physician of Greene County, Pa., died at his residence in Carmichaels, July 28th, 1881. Born July 18th, 1793, he was eighty-eight years and ten days old when he died. He was a resident of Carmichaels fifty-five years, and was in active practice about fifty years. He enjoyed alike the confidence of the profession and the community, as a wise and humane physician and a sound and able counselor.

QUERIES AND REPLIES.

Impotency.

MR. EDITOR: In reply to Dr. J. D., of Mo., I would suggest the following prescription, which I have found very beneficial in such cases:—

℞.	Liq. potass. ars.,	3j	
	Tr. canthar.,		
	Tr. nucis vom.,		
	Tr ferri chlor., aa	3ij	
	Ac. phos. dil.,	3j	
	Glycerine,	3ij.	M.

SIG.—Teaspoonful three times daily.

Mo. W. C. ROSE, M.D.

Dr. V. G., of Mexico.—The diplomas given at Philadelphia were for a while under a cloud, but any official body could readily learn which are bonâ fide. We are informed that the Mexican government requires *all* physicians who hold foreign diplomas to pass an examination. It is not an invidious distinction against this country.

Subscriber, of Maryland.—The principal methods of treating dysentery are (1) the expectant, (2) the saline, (3) the opium plan. In ordinary cases either answers; but in epidemic dysentery the latter, preceded by full enemata of warm water, to remove scybala, etc., is probably the safest.

Dr. C. E. O., of Miss —You will find the treatment of psoriasis discussed in the Special Report on Dermatology published this month.

Dr. W. H. S., of Pa —The regular sessions of the Edinburgh and Dublin schools will begin in October.

MARRIAGE.

NAGLE—NITTINGER.—Aug. 4th, 1881, at Emanuel's Evangelical Church, Fourth St., below Poplar, by Rev. J. P. Schnatz, Frank O Nagle, M.D., and Miss Mary Nittinger, both of Philadelphia.

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Original Department.

Lecture.

HEREDITARY SYPHILIS AND RACHITIS. THE CICATRICES.

DELIVERED AT THE HOSPICE DES ENFANTS-ASSISTÉS.

By M. Parrot, Professor of Children's Diseases in the Paris Faculty.

Gentlemen—In our first reunion I discussed syphilis as it appears in its state of activity, as an actual living entity; to-day I propose to speak of syphilis which has ceased to be active, which is, as it were, dead, and can only be recognized by the imprints it has left behind it. These marks are sometimes difficult to discover, and in the great proportion of cases remain ignored; but when they are seen the existence of syphilis may be affirmed.

In this study of extinguished syphilis, it is necessary to proceed like the paleontologist, who, in order to reconstitute a long forgotten species, extends his researches into the various strata of the earth's surface, collects, brings together and compares the diverse fragments he meets with, and thus forming a skeleton, is enabled from this fundamental notion to form a distinct idea of the entire animal, its appearance, habits and the conditions under which it lived.

In the same way, in order to trace in the human organism the signs of former disease, it is necessary to examine the surface and seek in its depths those signs, which will enable us to arrive at the malady from which it formerly suffered.

These imprints exist on the skin, the teeth and the bones. To-day we will study those observed on the external integument.

The lips of little infants but a few weeks old, born syphilitic, are frequently covered with erosions, from which exudes a very virulent liquid, which forms yellow crusts. This alteration is ordinarily too superficial to leave any trace. Such is not the case for the lesions which supervene after the third month. Frequently at this period fissures appear, oftenest on the upper lip, which may reach a depth of one or two millimeters. They appear on each side of the lobe (lobule) on the upper lip, and on the inferior, near the median line.

They are frequently observed also at the commissures. In this last situation the loss of substance is much more extensive, and the ulceration seems hollowed out of a sort of vegetation of the integuments.

These vegetations have never been, at least to my knowledge, a source of infection for nurses when the children were more than six months old, or when the bones already presented the spongoid alteration; but the children themselves have indelible cicatrices, which are more marked when the fissure was deep and of long duration. These cicatrices are white, occupy the entire thickness of the lip, and may be even a millimeter or more in width. At the commissures they are spread over the surrounding skin, forming a whitish spot with a regularly rounded periphery. Hereditary syphilis alone is capable of producing the ulcerations of which I speak and the cicatrices which succeed to them. There is one circumstance which may embarrass the observer; it is when there exists but one fissure, which occupies the median furrow (sillon) of the inferior lip. In effect, a deep and long lasting ulceration is sometimes observed at this point, in

cold weather, which leaves a cicatricial mark that cannot be distinguished from those of syphilitic origin, but this cicatrix (à frigore) is unique, and is never observed at other points of the lips.

The cutaneous part of the inferior lip and the chin sometimes become affected at the same time with the lips, and fissures are developed, which, during the acute periods are marked by scabs (croûtes). These give rise to numerous linear cicatrices, which sometimes cross each other at different angles, and sometimes take the form of a fan, of which the periphery or arch is turned toward the lip and the apex toward the chin. These remains of hereditary syphilis have a very characteristic aspect, and there can be no hesitation as to their origin.

2. The subcutaneous cellular tissue and the deeper layers of the skin are often the seat of syphilitic production, and though these are by no means rare, they have been mentioned and studied by very few authors, who have generally confounded them with other affections.

M. Lancereaux says that they have been observed by Putegnat and Bassereau. M. Julien, in a recent work, devotes but a few lines to their consideration. As regards the imprints which such lesions leave on the skin, no one has spoken. Generally they pass unperceived during the first period of their evolution, precisely on account of the region whence they spring. These subcutaneous lesions are at first small, hard, indolent masses, as large as a hemp-seed or a cherry. Although at first they may be mobile under the skin, they soon become adherent and engage the deeper layers of the skin in the morbid process. They then become prominent, and if the tumor is compressed between the fingers, a whitish yellow spot appears in the centre, through which, by transparence, its softened contents are seen.

If, as happens almost always, the evolution of the lesion is not troubled by any traumatism or therapeutic intervention, a small circular opening is formed on some part of the abscess, an opening often not more than a millimeter in width, through which its contents escape; in other cases this evacuation takes place through a narrow opening (fente) leaving a cavity which becomes very rapidly filled up, and finally there remains no further traces of this morbid process, except a small cicatrix, which is indelible and of a very characteristic form.

These cicatrices are not met with on all parts of the body. I have never observed any on the face or the upper limbs. Their seat of predilection is the skin of the gluteal region, of the thighs and limbs, on the outer posterior surface. They are not generally numerous, and are sometimes widely separated. It is rare to meet with more than two or three grouped on the same point.

They always have the form of a white line or point at the centre of a depression, which is more evident if the cicatrix is of recent formation. Below this is an induration, which disappears very slowly. After the fourth or fifth year, these cicatrices, which little by little tend to disappear, have very small dimensions; nevertheless they continue to have an aspect and topography peculiar to themselves, rendering them one of the most certain signs of hereditary syphilis.

The tunnel-like depression (dépression en entonnoir), of the cicatricial period is easily explained by the situation of the tumors; and by this fact, that after their rapid evacuation they are replaced by a cavern having a very thin cutaneous parietes, which soon becomes depressed on the deeper parts, and finally is joined by reparative adherences with them.

The cicatricial depression thus formed, at first very marked, is little by little effaced: as are all morbid marks in children under the influence of the physiological evolution.

Subcutaneous gummata are most frequently observed during the last two-thirds of the first year of the child's existence; after this age they are rarely observed. They are not generally developed at one time, but occur successively.

They have not all the same evolution; some remain hard for a long time, others, on the contrary, become soft very rapidly. If surgical intervention seems necessary, although the natural course of the affection demonstrates that it is not indispensable, a small puncture with a lancet may be made in the white spot of which I have spoken.

The syphilitic cicatrices of which I have spoken being limited to certain special points, have, on account of their localization alone, an appearance peculiar to them, and which serves to distinguish them from those I am now about to describe.

Much more frequently observed, but not the less typical, these cicatrices should be sought for with the greatest care, for of all the marks left by hereditary syphilis, they are the most common, and on that account the most interesting as regards diagnosis.

The cutaneous syphilides which oftenest give rise to these cicatrices are those in patches, that is, the papular form, and the ecthymatous or pustular form. The first, as you are aware, is composed of prominent, discoid patches, from a few millimeters to one centimeter and one

half in width, of a cherry red or copper color, sometimes purple or yellowish, almost always covered with small furfuraceous scales or a parchment-like crust; they are oftener isolated, but may be grouped into large and irregular patches. Their course is slow, sometimes they disappear to reappear later.

It is not rare to observe them ulcerated on regions subject to the contact of irritating liquids, etc., as on the gluteal region, the posterior surface of the thighs, and the scrotum.

They may attack diverse points of the external integument, but have a veritable predilection for the postero-inferior region of the body, and particularly for the gluteal regions and the adjacent parts.

Ecthymatous syphilides are much less frequent than the preceding form, and are very rarely observed in the points I have just indicated. It is rather on the inferior regions of the body, and particularly on the belly, that they are seen.

The marks left by these eruptions are indelible; their form, and particularly their situation, are valuable in forming a diagnosis. They are circular and of regular contour; sometimes slightly raised above the skin which surrounds them, but much more frequently they are marked by a depression, of variable depth; these differences are partly due to the period of time which has elapsed since their formation, and again, to other causes which escape our means of research. It is very rare that they are more than half a millimeter in depth; the surface is smooth, sometimes slightly unequal, with very small capsules. The color is of great importance and varies with the age of the cicatrix. In the greater number of cases, in the beginning, the cicatrix is of a uniform violet red tint, but soon three different zones of coloration can be distinguished, which are arranged as follows: At the centre is a disk which tends daily to become more markedly white; around this is a purple zone, and finally at the periphery is a second brownish red zone, not at all as clearly limited as the preceding. Little by little, the red or purple coloration, which was most prominent at the commencement, becomes effaced; on the contrary the central part, which corresponds to the true cicatrix, becomes more white, and the pigment which surrounds it darker. This last zone, very large and apparent in brown-skinned individuals, is, on the contrary, hardly visible in those who have the skin very white and clear. It remains for a long time, but finally disappears; and it is rare that any trace of it can be found in subjects after the sixth year. As age advances, through the modifications in the parts about the cicatrices, the depression and coloration tend constantly to disappear, and although in some cases it is possible to distinguish them during adolescence and adult age, they have almost disappeared, and much attention and a very good light is required to perceive them. In some cases, I have not been able to find them without the aid of a magnifying glass. With it, may be distinguished, here and there, little rounded patches, slightly furfuraceous, wrinkled, and pale.

It is customary to meet with cicatrices which differ very much as to width, depth and coloration, not only on different subjects, but even on one and the same individual. Some are hardly a millimeter in width, others are more than a centimeter and a half. Some with a marked purplish coloration are found beside others already very white. The pigmented zone is not always found at the periphery, and finally, as I have said already, the depression of the skin varies greatly.

I will add, that these varieties are frequently conjoined with syphilides in a state of activity; and in such case the entire pathological process is observed at one and the same time.

The topography of these cicatrices is of capital importance, and we cannot accord too much attention to it, for very often the diagnostic value of the cicatrix depends on the place it occupies. As it succeeds, ordinarily, to the syphilide in patches, it should necessarily be found in the regions where this form of syphilide is most frequent. And in effect, these cicatrices are found disseminated on the inferior part of the body, and behind, that is, on the sacral region and on the skin covering the coccyx, also on the gluteal region and the posterior surface of the thighs and legs. Sometimes they are disseminated over all these points in the same subject; in other cases they are limited to one point. The gluteal region is their seat of predilection, and it is here that they are most depressed. The postero-inferior region of the thorax, and abdomen, below the umbilicus, is often the seat of large and deep cicatrices, isolated or grouped together. Although more rarely observed than those we have already studied, their significance is none the less certain. They succeed to the pustular syphilides, which resemble somewhat ecthyma or pemphigus.

There are certain eruptive diseases which leave traces of their passage in cicatrices which last a considerable length of time, and which present a sufficiently marked resemblance to the imprints left by cutaneous syphilides. I will

indicate to you those which might give rise to error of diagnosis.

The variolic eruptions are of this number. The cicatrices which they produce are sometimes disseminated over the entire cutaneous surface, but are particularly frequent on the face. This situation, as also their uniformity and regularity, distinguish them from those due to syphilis. I have noticed these points of difference in six children of the same family. Four of the children have had the varioloid, and present the cicatrices left by this eruption; they are very regular, clearly limited, of equal diameter, scattered over the entire surface of the body. Five of these children had traces of extinguished hereditary syphilis, which, in two of the children, had left on the skin of the gluteal region and the adjacent parts numerous cicatrices, much nearer together, and less uniform in their diameter, color, and duration (age) than those due to the eruptive fever, and consequently easily distinguishable from them.

Varicella often leaves traces, but much more frequently on the face than on the other parts of the body, and particularly the gluteal regions. Again, the diameter of these depressions is very small, and no matter at what period they are observed they have no external pigmented zone.

Impetigo affects the head, and after complete cure the part affected cannot be distinguished. The diverse eruptions of scabies may affect the different parts of the body, but the limbs and extremities are most attacked, and the eruption disappears without leaving any marks.

Simple pemphigus, so frequent in young children, is generally observed at the upper part of the body, and not on those parts where syphilides are common; it disappears rapidly without leaving any trace. Tuberculous gummata are generally found on the limbs, and leave after them deep and profound ulcerations, and the cicatrices, irregular and traversed by bands (gaufrées), adhere to the subjacent parts.

The marks left by burns are always easy to recognize. They are large, of very irregular contours, of a pearly blue color (d'un bleu nacrée) often covered with bands of cicatricial tissue, and without any special localization. I have often observed them in the vicinity of syphilitic cicatrices, and I have never found the least difficulty in distinguishing them.

The marks left by croton oil are punctated and much more uniform than those of syphilis; they are grouped on the abdomen, and much more frequently on the thorax, differing widely from the usual situation of syphilitic cicatrices.

4. The cutaneous cicatrices provoked by hereditary syphilis follow one identical mode of development, no matter what may be the affection which has given rise to them. The differences which they present are due solely to the intensity, or if I may thus express myself, to the quantity of the primitive lesion; the situation is the same, whether the initial lesion be a raised patch, an ulceration, or a pustule. In effect, the microscopic examination of detached sections demonstrates that in all cases there is deposited in the derm, around the papillary vessels, and even around those more deeply situated, rounded corpuscles, veritable lymphoid elements, of which the number is different according to the variety of the lesion. In very small number in simple maculæ, these corpuscles are excessively abundant in the raised papule.

Consecutive to this first morbid process, and under its influence, the epiderm becomes affected in its turn, the cells of the mucous body (corps muqueux) of Malpighi become tumefied, proliferate in the inferior layers, allow themselves to be traversed by the liquids, which, passing from the dermis to the cuticle, raise the latter, and then they undergo other modifications.

In the greater number of cases when the morbid process is not violent, the lymphoid corpuscles, finding sufficient nourishment (trouvant à vivre) in the situation into which they are thrown, become organized and transformed into connective tissue, which, later on, by the retraction it undergoes, determines the depression on the cutaneous surface.

In the beginning the vessels of the region become considerably developed, and on histological section they are found almost always filled with red globules, which gives the purplish tinge to the parts affected. Later, when these vessels are pressed upon by retractile tissue of new formation, they lose in calibre, and the blood finds a narrowed passage, whence the white cicatricial spots.

In cases where the lymphoid elements become accumulated in considerable quantity, they cannot live, suffer disintegration, and consecutively ulcerations of very variable depth are formed. The cicatrices in such cases are more depressed and the papillary body almost always partly or completely destroyed. As regards the brownish zone, which for a period surrounds the cicatrices, it is due to the deposit of a variable quantity of pigment in the cells of the mucous body (corps muqueux) situated directly outside of those already attacked by the morbid process.

Communications.

INVESTIGATIONS IN RELATION TO THE CAUSE AND CHARACTER OF THE DIPHTHERITIC POISON, WITH NUMEROUS INOCULATIONS.

BY J. T. EVERETT, A.M., M.D.,
Of Sandusky, Ohio.

(*Concluded from p.* 201.)

Case 15.—With a portion of the contents of tube No. 3 a rabbit was inoculated upon the dorsum of the tongue, but with no result.

Case 16.—Inoculated another healthy adult rabbit with a portion of the same solution, with a like negative result.

These experiments convince us that the so-called diphtheritic poison is a specific entity, which under like circumstances and conditions produces like results. That the so-called antiseptics are in a marked degree true to name; and that with reference to the diphtheritic poison they rank as follows: 1st, chlorine; 2d, potass. perman.; 3d, acid. carbolic. These cases have been retained and reported, not for the histologic truths evolved, but for the purpose of showing the different potencies of the antiseptics used. Since these studies were pursued with a low-powered lens that aspect of the report has been omitted The following investigations were made with a more powerful and perfect instrument, and were to me instructive and interesting.

A portion of the washings of a plaque of diphtheritic membrane was mounted, and a satisfactory view was obtained of the micrococci and microbacteria of "Cohn." Another specimen was mounted, and I was fortunate enough to distinguish the entire family series. I now, after many experiments, discovered that by directing a fine air jet upon the liquid in the field of the microscope the different cocci could be separated and isolated.

Case 17.—6.40 A.M. Placed a few of the isolated micrococci upon a denuded spot on my left arm. 9.20 A.M. Slight itching and burning at point of infection. 12 M. Removed a drop of exuded serum from the point, and mounting it, detected young micrococci in great numbers. Slight opalescent exudation over the point of contagion; cephalalgia. 9 P.M. Some fever. Pulse 85, temperature 100° F., in axilla of left arm. Lymphatic glands on that side turgid and full; exudation thicker and more opaque, and more populous with cocci. 12.30 A M. Pain in axillary and submaxillary glands. Fever and headache. 7 A M. Urine slightly albuminous and copious. Pulse 110. Temperature 101.5° F. Fauces dry and tongue coated. 12 M. Pulse 110. Temperature 101.5. Slight patches appearing on tonsils. A portion removed and mounted shows many micrococci and a few microbacteria; as there were no microbacteria injected, the question arises, whence their origin? The urine was now heavily loaded with lithates and phosphates, and slightly albuminous. Bowels constipated and slight lumbar pain. Commenced taking five-grain doses of quinine sulphate every four hours, also drachm doses of saturated solution of potassium chlorate. Every hour inhaled vapor of oxygen containing as much chlorine as could be tolerated.

6. A.M. Lumbar pain still prevails; pulse 100, temperature 100°; slight hoarseness and cough; bowels slightly loose. Throat clearing off, but sore and red. Urine less heavily loaded. Lymphatic glands still hard and tender.

9 P.M. Symptoms steadily improving; pulse 95, temperature 99.5°. Omitted medicine from this time on, with the exception of a gargle of potass. chlor., which was used for a week before entire recovery of the throat took place. For a long time the fauces were very sensitive to sudden changes of temperature. Cardiac irritation, which had troubled me for some years previous to this experiment, seemed to be exaggerated.

Case 18.—11 A M. Placed a few isolated microbacteria upon the fauces of a robust German girl, twenty years of age, suffering from uncomplicated tonsillitis.

4 P.M. Tonsils presenting milky exudative dots at point of contagion.

9 P.M. Pulse 105, temperature 100.5°. Fauces coated with semi-transparent, fibrinous deposits. Urine slightly albuminous.

9 A.M. Pulse 115, temperature 101.5°. Deposit on fauces shows bacteria and *cocci*. As no cocci were implanted, where did they come from? Are these germs interchangeable forms of the same organism?

12 M. Throat clearing off; fever has subsided. Urine presents faint trace of albumen but no casts. In this instance patient was put upon the same course of treatment as in my own case. From this time on patient made a good recovery.

Case 19.—Sister of last patient; aged nineteen years and of strong physique. 11 A.M. Isolated a few spirobacteria, and inserted among the faucial folds. 4 P.M. Right tonsil red and angry. 9 A.M. Grayish deposit on fauces. Lymphatic vessels and glands in neck and axilla swollen and tender. Urine scanty and turbid.

Pulse 85, temperature 99 8°. 12 M. Fever well marked; pulse 115, temperature 101.5°. Dryness and pain in fauces. Stiffness of jaws and hoarseness. 4 P.M. Patient nervous and irritable; high fever, and throat freely coated with exudation. Urine albuminous and shows hyaline and epithelial casts.

5 A.M. Patient better; pulse 98, temperature 100°. Exfoliation progressing rapidly. Urine less heavily loaded with debris.

8 A.M. Pulse 85, temperature 99°. Urine less colored. Throat ragged. The same treatment was pursued from the first symptoms in this case as in the two previous ones. In this case a mounting from the faucial deposit showed large numbers of spirobacteria, both of the genera *tenue* and *undula*, the *undula* largely in excess; a portion of renal epithelial excretion showed, however, *tenue* in excess, also some larger cocci and unclassified forms, with large quantities of granular matter and pigment cells. As great care was taken in isolating the spirobacteria in the infecting liquid the result was surprising and quite inexplicable.

CASE 20.—Patient an American, fifty years of age, a man of dissolute habits. Recently recovered from secondary manifestations.

8 A.M. Introduced a mixed colony of bacteria beneath the cutis upon left arm. 8 P.M Slight roseolar appearance at point of infection. Axillary glands and vessels full and painful. 8 A.M. The glandular system engorged and active. Arm red and swollen; high fever. 12 M. Red lines extending from point of infection up along the track of the lymphatics. Pulse 110, temperature 101.5°. Urine scanty and clouded; throat extensively involved at seat of old specific ulcers. Increased activity of the cocci, burrowing deeply and propagating rapidly. Back and loins are exquisitively sensitive. Pain in the jaws. Lungs and spleen tender and irritated. Bowels constipated. 4 P.M. Fever increasing; pulse 125, temperature 101.8°. Urine scanty and albuminous. Cough and expectoration of white granular mucus; slight jaundiced hue of skin and conjunctiva. Throat is exfoliating, leaving large, deeply excoriated spots. Specimen mounted presents immense numbers of bacteria of all types. Larger cocci and unclassified forms the most numerous.

11 A.M. Fever increasing. Pulse 130-140 and unsteady, temperature 104°. Mucous surface presents dark, ragged, unhealthy bases, with no disposition to granulate. Mental aberration. Epistaxis and tendency to passive hemorrhages from the denuded surfaces. Urine heavily loaded with casts, albumen and debris.

12.30. Respiration labored and slow. Fever still high.

In addition to the medication, which was similar to that in the three previous cases, the patient was placed in a bath at the temperature of 70° Fahr., and retained therein for thirty minutes; upon removal the axillary temperature had fallen to 101.5°, and the pulse had dropped to 110 per minute. The patient was now given thirty grains of quinine sulphate and put to bed. 6.30 A.M. Patient conscious and head easier. Has experienced no "tinnitus aurium" from the large dose of quinine. Pulse 100, temperature 101.1°. Fauces dark and unhealthy; but a few drops of pus has appeared.

As patient had suffered from constipation from the commencement, he was given grs. xx hyd. chlor. mit. The lymphatics presented a soft and sloughy appearance.

9 A.M. Free catharsis; expelled large numbers of cocci and bacteria with the fæces. Pulse 98, temperature 100.8°. Liver still tender, though not occupying so much space. Spleen more active. Kidneys still throwing off large quantities of debris. Patient very weak and exhausted.

Left off the quinine and the inhalations, and substituted a pill composed of phos., strych. and damiana.

4 P.M. Patient easier and sleeps much. Relishes beef tea, eggs and brandy, more especially the *brandy*. Patient made a very slow recovery, and at several times suffered from relapses and paralyses of special muscles. Regained good health but the virile appetite was entirely destroyed. This teaches that the world was really benefited by the experiment, both in a scientific and a moral point of view, although from the severity of the remedy a more harmless anaphrodysiac would be indicated. Having so nearly sacrificed the life of this patient upon the altar of my enthusiasm, I resolved to confine all future experimentation to the field of the animal kingdom.

Preparatory to this I isolated a number of micrococci and inoculated three healthy rabbits with about an equal quantity of the cocci.

CASE 21.—8 A.M. Rabbit No. 1 was kept in common air and his symptoms noted at intervals. 12 M. Shows signs of uneasiness. 4 P.M. Slight fever, thirst, redness of fauces. 9 P.M. High fever, patches of fully developed micrococci. 9 A.M. Rabbit in comatose condition. The rabbit was now killed and colonies of cocci were found in the larynx, pharynx and trachea. Other pathological conditions the same as in similar cases.

Case 22.—8 A.M. No. 2 was placed in an atmosphere heavily charged with vapor of acid. carbolic., and at 12 M. uneasy and restless, with slight febrile symptoms. 4 P.M. More quiet, sleepy and stupid. Tongue furred and slight fever. Urine high colored. Slight patches appearing upon fauces at seat of infection. 9 A.M. Killed this rabbit and found thin, weak patches of cocci in fauces, throat and larger bronchi. Other pathological appearances the same as in similar mild cases.

Case 23.—8 A.M. Placed rabbit No. 3 in an atmosphere heavily charged with oxygen and as much chlorine diffused as the mucous tissues would tolerate. 12 M. Restless and uneasy. 4 P.M. Nearly as quiet as usual. Buccal membranes red and active. 9 P.M. Slight febrile symptoms, but no exudation. 9 A.M. Killed this rabbit and found a few small, weak cocci burrowing down among the epithelial cells, as if seeking to escape the effects of the chlorine.

Case 24.—Isolated a number of microbacteria and placed a few upon the fauces of three adult healthy rabbits. No. 1 was confined in common air at 6 A.M., and retained in that medium until 6 P.M., when he appeared feverish and uneasy. 8 A.M. Killed and found fauces extensively coated with deposit abounding in bacteria. Other conditions as in similar stages of diphtheria.

Case 25.—6 A.M. Rabbit No. 2 was confined in carbolated vapor, and at 12 M. showed no symptoms of uneasiness or distress. 4 P.M. Slight fever, but no exudation. 9 P.M. Slight fever with mucous exudation. 8 A.M. Killed rabbit and found a few weak spores of microbacteria.

Case 26.—8 A.M. Rabbit No. 3 was enclosed in an atmosphere of chlorinated oxygen. 9 P.M. Slight febrile symptoms. 9 A.M. Killed rabbit and found tissues nearly normal, except some superficial excitement occasioned by the fumes. No deposit, and could find no bacteria.

Case 27.—Inoculated rabbit with micrococci, immersed in an atmosphere of carbolic acid and killed at the expiration of twelve hours; found numerous and extensive distribution of cocci.

Case 28.—Inoculated rabbit and immersed in carbolated fumes for twenty-four hours, when, upon making post-mortem, vast accumulations of cocci were found.

Case 29.—Infected rabbit with micrococci and subjected to fumes of carbolated air for thirty-six hours; then killed and found relative number of cocci lessening.

Case 30.—Infected rabbit with micrococci and subjected to fumes of chlorinated oxygen. At the end of twelve hours killed and found a few weak cocci.

Case 31.—Infected rabbit with micrococci and confined in an atmosphere of chlorinated oxygen for twenty-four hours, when post-mortem revealed still less cocci than in the previous case.

Case 32.—Infected rabbit with the same germs and subjected to the same fumes for thirty six hours, when, upon examination, only a few isolated inactive germs were found.

Case 33.—Infected rabbit with microbacteria, and subjected to carbolized vapor for twelve hours, and killed and found bacteria, free and encysted, healthy and active.

Case 34.—Infected another rabbit with the same virus and subjected to same fumes for twenty-four hours, then killed and found more bacteria than in the previous case, but burrowing deeper into the tissues.

Case 35.—The same infection, and under the same circumstances, for thirty six hours, when examined showed a few cocci and a large number of microbacteria.

Case 36.—Infected rabbit with microbacteria, and after breathing an atmosphere of chlorinated oxygen for twelve hours the autopsy revealed a few scattered bacteria and a few cocci (?) both being dormant and inactive.

Case 37.—The same infection and same atmospheric environments for twenty-four hours presented a few faint traces of bacteria.

Case 38.—Subjected rabbit to same infection and same treatment, and after waiting for thirty-six hours, killed and found neither of the germs above mentioned.

Case 39.—Infected rabbit with spirobacteria and subjected to carbolized air for twelve hours, when autopsy showed the spirillum in increased numbers.

Case 40.—The same in all respects as Case thirty-nine; kept twenty four hours; killed and found a smaller number of spirillum than in the previous case.

Case 41.—In this case the same infection and the same counteracting influences; at the end of thirty-six hours killed and found but very few spirillum.

Case 42.—Infected rabbit with spirillum and subjected to chlorinated oxygen for twelve hours. A few pale, weak spirillum, not markedly increased.

Case 43.—Rabbit placed under the same conditions as in Case forty-two, and at the expiration of twenty-four hours presented perfectly normal appearance.

Case 44.—Same as the two previous, and at

the end of thirty-six hours presented negative result as to contagion.

Case 45.—Isolated a number of micrococci and passed a strong galvanic current through the liquid for several minutes; with this preparation a rabbit was inoculated, with negative result.

Case 46.—In like manner galvanized a colony of microbacteria and inoculated a rabbit, with a like failure.

Case 47.—A colony of spirillum were galvanized and injected into the tissues of a healthy rabbit, with like failure.

Case 48.—Galvanized a fragment of fresh diphtheritic membrane, which contained a large number of the germs, and placed it upon the fauces of rabbit. No result.

Case 49.—Infected rabbit with a portion of the membrane from the same source as that last mentioned, and after twelve hours symptoms of infection had appeared. Galvanized the seat of infection, but case progressed to fatal termination.

Case 50.—Infected rabbit as in last case, and at the expiration of six hours gave local and general galvanization. The symptoms were apparently ameliorated, but the case nevertheless, reached a fatal termination at the expiration of forty-one hours, presenting the anatomical lesions usually found in an uninterrupted case of "diphtheria."

At the conclusion of these experiments, I, of course, was firmly convinced that the theory was satisfactorily demonstrated, that "diphtheria depended upon the vegetable sporules," as heretofore described. Continuing my series of investigation through the last year, various occurrences pointed towards the conclusion that, although these bacteria were an *almost* constant accompaniment of diphtheria, yet a doubt arose as to their being the cause.

During the month of September, 1880, an epidemic of diphtheria made its appearance in our midst, of quite a mild type. The fatal cases averaging about five per cent., but presenting all the symptoms and contagiousness of genuine diphtheria. In twenty microscopical examinations of material from these cases, only three presented appearances of the bacterioid group, and these were all in cases that recovered.

January 15th, 1881. Was examining a specimen of diphtheritic membrane which I had secured from a patient of a neighboring physician, whose case terminated fatally. Being unable to discover any cocci, or other of the group of germs, I made a solution of the washings from the membrane, and was continuing my search assisted by blowing a fine jet of air upon the liquid upon the glass slide from the mouth, through a fine glass tube. Inadvertently I placed the wrong end of the tube in the mouth and conveyed some of the liquid to the tongue and fauces. At once infection was set up, running its regular course, though mitigated by treatment; the fever for forty-eight hours was high. In this case I am certain there were no bacteria in the specimen examined, nor did they appear in any of the secretions during its course.

In view of all these facts, what are we to conclude? Is it *not probable* that the true virus is a chemical agent, and that the cocci, bacteria, etc., are simply an accidental accompaniment or carrier of the poison? Or do we have protoplasmic germs too small for the microscope, but which produce the bacteria in the deeper tissues? The frequency and almost constancy of appearance during the first years of the experiments, points toward the conclusion that these germs were *the* ultimate cause; while the later results *seem* to indicate their accidental presence in the previous cases, or the supposition that in these later cases we had a modified form of disease to deal with, which, in its symptomatology and pathological lesions was precisely similar, but different in its etiology. One fact is demonstrated, that antiseptics benefit the disease.

CHLORAL HYDRATE IN DYSENTERY, GASTRITIS AND ALLIED DISEASES.

BY H. H. KANE, M.D.,
Of New York.

Dysentery.

Chloral has been used with considerable advantage in dysentery. It undoubtedly does good, and has a treble action, viz: as a local stimulant and anæsthetic, as an allayer of spasm and as an antiseptic. That it has an antispasmodic action aside from that due to local contact is proved by the fact that it has been found to produce the same result when used by the mouth.

Dr. Curci* (*Il Racogliatore Medico*, Nos. 15–18, 1878), having found chloral of decided benefit in the diarrhœa of typhoid fever, tried it in seventeen cases, during an epidemic of dysentery. The results in all were very satisfactory. He first gave it in combination with chlorate of potash, but he afterward gave it alone, using barley water as a vehicle. It was given both by the mouth and enema. When given by the mouth the dose was from one to three grams a

* Practitioner, Oct., 1869.

day; as an enema, one gram of chloral was dissolved in two hundred grams of barley water. When given by the mouth Curci advises the use of a mild purgative first, in order to prepare the bowels for the action of the medicine. It acts not only as a soporific, but also as a sedative, astringent, antispasmodic and antiseptic. If it only lessened the pain by producing sleep it would be anything but a desirable remedy, as the disease must be progressing, while the patient and physician are lulled into a false security. It has a very decided action, however, aside from this, through its action on the cerebro-spinal system as well as on the sympathetic; the nerves being very much affected in dysentery, the discharge will be lessened and the formation of flatus, a source of so much pain in this disease, prevented. After two or three grams have been taken (in some mucilaginous vehicle), there is first an increased peristaltic movement, which is followed by diminution in the sensibility and the frequency of the stools. This effect is due to the action on the sympathetic, there being first an excitation and then a paralysis produced. In this way the chloral lessens both the pain and the discharge. Curci thinks that purgatives given in the early stages of the disease are the only medicines comparable in value to chloral. He condemns antiphlogistic remedies, as well as the use of opiates and astringents.

Dr. David Prince,* of Edinburgh, who was one of the first to use this drug in dysentery, employed it as an abortofacient, giving a dose large enough to procure sleep. He used it in conjunction with one or two ounces of the sulphate of magnesia, and says that the subcutaneous use of morphia aids its action. Curci † does not believe, with Dr. Prince, that it lulls the pain and lessens the number of passages simply by its action as a hypnotic, but by a direct and positive effect on the sympathetic system.

Drs. W. L. Newell‡ and J. S. Whittaker have used chloral enemata in a large number of cases of this disease with excellent result, in every case aborting the disease within a few hours.

In the case of a child of eleven, who suffered with thirst, pain, tenesmus, and had twenty-five to thirty dejections in twenty-four hours, 5 grs. of chloral hydrate in 2 ozs. of starch gruel were thrown up the bowels, with considerable force, from a hard rubber syringe. The injection remained three hours, during which time the child slept. Many of the other symptoms were modified, and the injection was repeated, remaining seven hours, and then came away with some fecal matter, but without tenesmus. Four enemas were given, in all, and treatment was discontinued in forty-eight hours. It was also tried in the case of a lady, aged twenty-five, using ten grains instead of five, and securing complete repose for eight hours, although she had previously had twenty to thirty movements in twenty-four consecutive hours. In conclusion, he says: "The number of aggravated cases of dysentery we have treated with chloral hydrate warrants us in the assertion that, if early and promptly used, it is almost a specific."

J. M. Pace, of Dallas, Texas, and C. H. Hunt, of Stanwood, Ohio, write me that they have had good results in its use in this disease. In a case of very painful chronic inflammation of the rectum, Prof. H. M. Lyman* injected a fifty per cent. solution of this drug, with decided temporary benefit.

Too much credit must not be given, however, to any drug in the treatment of cases of acute sporadic dysentery, as will be seen by the following: Prof. Austin Flint,† a very careful and reliable observer and student, reports ten cases of this disease that from beginning to end were entirely unmodified by medical treatment. Among other conclusions arrived at are the following:—

1. The disease in a temperate latitude tends, without treatment, to recovery.

2. It is a self-limited disease, and its duration is but little if at all abridged by methods of treatment now and hitherto in vogue.

3. Convalescence is as rapid when active measures of treatment have not been employed as in cases actively treated.

Dr. C. T. Rodgers,‡ of Lipau, Texas, has used chloral by the rectum in this disease, without obtaining any good results.

Dr. T. J. Crofford,§ of Coffeeville, Miss., has thus used it with success. I have been much pleased with its action in four very severe cases, where I followed Curci's plan exactly. It rapidly allayed tenesmus, relieved pain, diminished the frequency of the motions and produced refreshing sleep.

In infantile diarrhœa some observers have found it to act almost magically.

James Tisou‖ praises highly the combined use

* (Edinburgh *Medical Journal*), *Braithwaite's Retrospect*, Jan., 1877, p. 272.

† Op. cit.

‡ (Philadelphia *Medical Times*), *Druggists' Circular*, etc., December, 1878.

* By letter.

† *American Jour. Med. Sciences*, July, 1875.

‡ By letter.

§ By letter.

‖ (*Le Progres Médical*, January 31st, 1880), St. Louis *Courier of Medicine*, April, 1881.

of hydrate of chloral and oxide of zinc, in cases of intestinal irritation, infantile diarrhœa, summer diarrhœa in young infants. He administers chloral by injection and oxide of zinc by the mouth. At the same time a strict diet is prescribed. Here are his favorite prescriptions:—

℞. Chloral hydrate, 1 gm. 30 grs. xxiiss
Starch water, 60 gm. ℥ ij. M.

Sig.—One, or one and a-half coffeespoonfuls for a small injection, repeated twice or three times a day.

On the other hand, he gives, every five hours, a coffeespoonful of the following mixture:—

℞. Zinci oxidi, 1 gm. 50 grs. xxiiss
Pulv. gum. acaciæ, 7 gm. 50 grs. cxij
Sacch. alb., 7 gm. 50 grs. cxij
Lactopeptine, 3 gm. 50 grs. lij
Aquæ canellæ, 32 gm. ℥ j.

Prof. Adolph Kjellberg* writes, in *Nordiskt Medicinskt Arkiv*, vol. xi, No. 3, that there is no medicine which is of so much use as chloral in checking the vomiting in acute gastro enteritis of children. Being rapidly absorbed it stops the vomiting, calms the patient, and often checks the diarrhœa. It is best given by enema, so as not to risk its rejection by the irritable stomach. It should be given soon after the bowels have been moved. The dose for a child of from five to six months is twenty-five to thirty centigrams (three and a half to four grains), while to a child of from twelve to fifteen months, fifty to sixty centigrams (seven to eight and a half grains) may be given. The bulk of the injection should not exceed a dessertspoonful. The enemata may be repeated two or three times daily, and the dose may be increased if it is found necessary. In order to increase the effect of the chloral the author generally adds to each enema a drop of the tinct. opii, and if stimulants be indicated, five to fifteen drops of liq. Hoffman. At the same time other remedies are not neglected; iced water, or cognac, or champagne for the vomiting, opium for the diarrhœa, hot mustard baths for albuminuria, should it occur, stimulants for collapse, etc.

Dr. Quintius C. Smith,† of Austin, Texas, has found it of service in infantile diarrhœa.

Dr. Créquy‡ (*Bull. Gen. de Therap.*, Sept. 30th, 1875) relates two well marked cases of fissure cured by this drug. Charpie soaked in 1:50 sol. was inserted just within anus. Bowels regulated. Pain disappeared after first few applications.

* Western *Lancet*, May, 1881, p. 142.
† By letter.
‡ (London *Med. Record*, Nov. 15, 1875), *Monthly Abstract*, Jan., 1876.

In cholera morbus and intestinal colic this drug has been successfully used. Dr. Louis B. Bouchelle* says, that in cholera morbus, a single dose of 20 gr. will often stop all suffering. Dr. Evan Cameron† reports like good results in two cases of severe cholera morbus in adults. Bartholow‡ speaks highly of it in severe cholera morbus. Dr. John D. Jackson,§ of Danville, Ky., says that as, in animals, digestion and peristaltic action go on while they are taking chloral, it should therefore be of little service in colic and like affections. Clinical experience proves this not to be the case, and the argument is undoubtedly based upon wrong premises, for no drug that acts as an antispasmodic in abnormal condition of spasm, interferes in health, in medicinal doses, with normal muscular action.

Dr. E. Noble Smith‖ reports a case of obstruction of the bowels, presumably spasmodic, with stercoraceous vomiting, where a rapid relief to all symptoms followed the use of chloral.

Dr. Monckton,¶ of Maidstone, relates a case where a hernia had been reduced some months before. Symptoms of strangulation of the gut in the abdomen appeared. Full doses of chloral quieted pain, produced sleep, and the patient fully recovered.

The following interesting case is by Dr. Salvator Caro:—**

A feeble old man, aged 86, with senile paralysis, had suffered with oblique inguinal hernia since the age of 24; always wore a truss, except at night. On retiring at 10 P.M. Nov. 1st, the intestine came down; he could not return it; after six hours I was summoned; found left hernia in inguinal, somewhat strangulated; easily reducible. The right was in the scrotum, and obstinately resistant to all efforts at reduction. After a long and unsuccessful trial at taxis, strong belladonna fomentations were applied, and castor oil administered; oil was vomited; belladonna did no good. 10 A.M. patient was chloroformed to anæsthesia; reduction still impossible; left eight hours under belladonna fomentations, when a tobacco enema was given, with no benefit: eight hours after this, and twenty-eight after the first discovery of the strangulation, patient growing weaker and more restless, with increasing abdominal pain and anxiety, recourse was had to hydrate of chloral; the specimen used was pre-

* Boston *Med. and Surg. Journal*, 1874, p. 275.
† *Lancet*, Feb., 1871.
‡ "Hypodermic Medication," Phila., 1879, p. 191.
§ Richmond and Louisville *Med. Jour.*, Feb., 1871.
‖ *Lancet*, Sept. 1871.
¶ (*Brit. Medical Journal*) *Practitioner*, 1870, p. 369.
** New York *Medical Record*, Jan., 1870.

pared by E. Schering of Berlin. One gram and a half, equal to 23 grains, was dissolved in mucilage and exhibited by the mouth. Almost immediately the patient assumed a cadaveric aspect, and appeared to be in articulo mortis; at once resorted to manipulation of the intestine; it was easily returned within the abdomen twenty-five minutes after chloral had been given. Revived the patient by injection of brandy and milk per rectum, with a Davidson's syringe, in twelve hours.

Gastritis and Vomiting of Pregnancy.

Hertzka,* found chloral of great service in allaying the symptoms of ulcer of the stomach.

Dr. Ademolo,† relates four cases of nocturnal vomiting cured by small doses of chloral.

Dr. Allison Maxwell, of Indianapolis, Indiana, writes me: "The chloral had a very happy effect in the case of gastritis referred to. The patient was Dr. Theophilus Parvin's, a woman whom I attended for him when he was called out of the city. She had been vomiting every hour in the day for two weeks, and was fast becoming emaciated. All remedies had failed, and the chloral checked the vomiting in about twenty-four hours."

Marjolin,‡ has found small doses of chloral by the rectum to act well in allaying the pain and vomiting that accompany burns. The use Kjellberg has made of the drug in the vomiting of acute gastro-enteritis of children has already been spoken of.

Starcke,§ (*Berlin. Klin. Woch.*, August, '78), who had long been suffering with chronic catarrh of the stomach, was tormented by sleeplessness. Chloral was used by rectum with effect of producing sleep, improving appetite and digestion; there being no longer headache and nausea. The point of the syringe must be well oiled, introduced *beyond* sphincter, and the fluid be warmed. He found that dose by rectum should be lower than by mouth. Fifty centigrams ($7\frac{3}{4}$gr.) were sufficient in his case.

Dr. R. Hazelhurst,‖ of Brunswick, Ga., used it with but moderate success in the vomiting of yellow fever.

Dr. O. D. Abbott,‖ of Manchester, N. H., has used it with benefit, by the rectum, in diseases of the stomach. Drs. James Donaldson ‖ has found it of service in gastric pain and colic; J. M. Pace,‖ of Dallas, Texas, in lead and wind colic; A. P. Brown,‖ of Jefferson, Texas, in colic; and Finley Ellingwood,* of Manteus, Ill., in enteritis and peritonitis.

Dr. C. C. Fite, of Shelbyville, Tenn., has found it specially indicated in those cases of extreme irritability of the stomach and bowels where opium has failed to give relief. Chloral given by enema, 30 grains at a time, produces quiet and sleep, and the nausea and diarrhœa are entirely relieved.

Pilcher† has found chloral and morphine excellent in the passage of gall stones. In Carlsbad, this affection is very common, and the results are always good under this plan of treatment.

Combining chloral with soda, after Liebreich's method, C. H. Hunt, of Stanwood, Iowa, has found great satisfaction in the treatment of this disease.

Giraldes‡ used chloral by the rectum in 60 grain doses, for the relief of hepatic colic, with success.

Constipation, presumably due to either spasm or torpor, has been rapidly relieved with chloral by A. S. Payne§ and E. Brallier, of Chambersburg, Pa. Payne has also used it in dyspepsia, with tr. lupulin.

Dr. J. Wm. Walls,‖ of Baltimore, Md., has used it by the rectum, with decided success in the vomiting of pregnancy.

Dr. J. H. Scorff¶ (*Va. Med. Monthly*) used 20 grain doses of chloral by the rectum, repeated two or three times, with a good result in the vomiting of pregnancy, as also has Dr. W. H. Morse.**

Dr. Herzberg,†† of the Berlin Charitè (*Berl. Klin. Woch.*), has found chloral of great utility in vomiting from any cause, and in some affections, as gastralgia, rapidly effective. In this paper he wishes to call attention to its great efficacy in the vomiting of the early months of pregnancy. He always uses this formula: Chloral one and a half, water one hundred, and syrup of orange-peel twenty parts, giving a spoonful every two hours. A few spoonfuls suffice to stop the vomiting for a long time. If after some days it returns again, a recurrence to the remedy entirely removes the evil.

Dr. D. B. Simmons,‡‡ Chief Surgeon to Ken

* St. Louis *Med. and Surg. Journal*, July, 1874.

† (L'Imparciale, March 17th, 1875), *Edinburgh Med. Journal*, Sept., 1875.

‡ *Gaz. des Hôpitaux*, 1870, p. 227.

§ London *Med. Record*, March 15th, 1879.

‖ By letter.

* By letter.

† *Allgemeine Wien. Med. Zeitung*, Nov., 1873

‡ Quoted by Panas, *Gaz. des Hôpitaux*, 1870, p. 530.

§ *Southern Med. Record*, Dec. 18, 1874.

‖ By letter.

¶ Quoted by J. W. Hickman, *N. Y. Med. Record*, Jan. 1881.

** *N. Y. Med. Record*, Oct. 15, 1874.

†† *Ohio Medical Recorder*, April, 1880.

‡‡ (*N. Y. Med. Record*, June, 1874), *Practitioner*, 1874, p. 206.

Hospital, Yokohoma, Japan, has successfully used chloral enemata to relieve the vomiting of pregnancy. Woman aet. 30 years, third child. Had vomited from fifth to tenth week of pregnancy. For several days previous to his seeing her the nausea and vomiting had been almost constant. She had become ve y much emaciated and was unable to sit up, even in bed, not having retained any nourishment on the stomach for several days. All the usual remedies had been tried, such as oxalate of cerium, hydrocyanic acid, hypodermic injections of morphia, etc., but with little benefit. He suggested 30 grains chloral hydrate in mucilage, by the rectum, morning and night. An amelioration of the symptoms was obtained by the first injection, and a still more satisfactory one followed the administration of the second. The second day's use of the remedy arrested the vomiting, except at long intervals, and on the third day both vomiting and nausea ceased entirely.

He again * calls attention to this method of treatment. Further experience still more impresses him with its usefulness. The amount of each drug and the frequency of its administration depend on individual susceptibility to its influence, but in general the dose of twenty to thirty grains of each, dissolved in gum-water, may be injected, at short intervals, until a moderate degree of narcotism is produced.

* *American Journal of Obstetrics*, April, 1879.

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

SERVICE OF JOHN ASHHURST, JR., M.D.,

Prof. of Clinical Surgery.

Reported by Guy Hinsdale, M.D. May 21st, 1881.

Retained Testicle.

Case 1.—The first case that I show you to day is interesting, from presenting a question of diagnosis. The patient's history is that for the last four years he has noticed a lump in his left groin. He was hit in that region by a ball. Upon looking at him the first thing that would strike you is the absence of the testicle on the left side. It is a case of retained testicle or partially retained testicle. These, as you are aware, are, during fœtal life, abdominal organs, and some persons go through life with the testicles retained. Those who have both testicles retained are called cryptorchids, while a person in whom only one is retained is called a monorchid, the other testicle having come down and being in its proper position. As a result of this condition we may have an imperfect closure of the communication between the tunica vaginalis and the peritoneal cavity, the abdominal fluid finding its way into the scrotum. This is the case in that form of hydrocele met with in infancy. A testicle which has not descended into its proper position is more likely to become diseased than one which has reached the scrotum. An organ which does not discharge its proper functions is exposed to degenerative changes. The testicle may take on cystic or sarcomatous degeneration. Hence we not infrequently have a sarcocele as a complication of undescended testicle. A cryptorchid is, according to most authorities, invariably sterile.

In this case no operation is required. If there should be any tendency to hernia we would apply a truss. Sometimes the testicle can be coaxed down into the scrotum, and in other cases it can be returned to the abdomen and a truss applied. If the testis is fixed in the groin, and hernia exists, we can employ a truss with a concave pad, which will exert no direct pressure upon the testis itself. If the testicle were subjected to any pressure there would be greater liability to disease. As the patient coughs I feel the impulse of the bowel in the inguinal canal. If any disease should follow, as, for instance, cystic degeneration, there might be necessity for an operation. If the tendency to hernia should increase, I would recommend placing a pad over the testicle, so as to prevent the descent of the hernia.

Compound Comminuted Fracture of the Jaw.

Case 2.—After an injury so extensive as you see in the case of the man now brought before you, it is almost impossible to keep the jaw fixed. What I propose to do to-day is to remove the detached, middle fragment, and to fasten together the remains of the jaw with a wire. I think that by these means we can keep the parts in apposition for a sufficient time for union to occur.

In regard to fractures of the jaw, I find that students are very apt to make mistakes; they often forget that, in the region of the mouth, compound fractures are more likely to occur than simple fractures. They are compound not through the outside skin, usually, but through the mucous membrane. In consequence of this, the treatment of fractures of the jaw is nearly always prolonged; they require a longer time to get well than fractures of equal severity in other parts of the body. This fracture is compound both from within and without. I detach the central fragment, which is long and slender and carries a single incisor tooth; if I had allowed it to remain it would certainly have become necrosed. It is attached by only a little portion of the gum. I shall insert a wire into the bone on either side in order to bring the parts into apposition, so as to get union. Here I use a neat mechanical drill working with a wheel.

It is said that Velpeau, during the last years of his life, in treating fractures of the lower jaw, abandoned altogether any apparatus for insuring apposition of the parts, believing that the pain on moving the jaws was sufficient to ensure requisite rest. I think, however, that comfort can be given by the use of a Barton's bandage, and I do not doubt that still more accurate adjustment is gained by the dental splint, but the treatment is more annoying to the patient. Attention was directed to this mode of treatment in

the case of the late Mr. Seward, President Lincoln's Secretary of State. In the attack made upon him on the night of the President's assassination, he received, among other injuries, a severe fracture of the lower jaw. In his treatment interdental splints were used with very good results.

NOTE.—Prof. Ashhurst, after drilling holes in the two opposing fragments, introduced a wire, twisting the ends so as to bring the fragments closely together. There was no hemorrhage. The patient did well after the operation, and when the wire was removed, some weeks subsequently, the bone was in good position, and union was fairly advanced.

Cutaneous Proliferous Cyst of the Back.

CASE 3.—This patient presents a small tumor of the back and a small discolored spot, as though at one time it had discharged. It is one of those cases that the Germans speak of as retention cysts. There is a retention of the normal secretion of the part. The natural orifice becomes occluded and the exudation of material in the cyst continues. When this cyst is laid open we shall see why Paget classified growths of this kind as cutaneous proliferous cysts. In the majority of cases no true cutaneous lining can be recognized, but the cysts are found to contain epidermal scales, sebaceous matter, fat granules, cholesterine and rudimentary hairs. Those that are congenital and that are found in the subcutaneous tissues approach most nearly to the typical character. A favorite seat is in the orbital region, close to the external angular process of the frontal bone; in this portion of the body they are very adherent. The treatment consists in total excision.

NOTE.—A longitudinal incision was then made over the tumor, the cyst dissected out, a drainage tube was introduced and the parts brought together by silver sutures. The wound was then covered with strips of adhesive plaster, oiled lint and oiled silk. The patient did not take ether.

EDITORIAL DEPARTMENT.

PERISCOPE.

On the Causes and Prevention of Myopia.

The Philadelphia *Medical Times*, July 30th, 1881, contains an article entitled, "Weak Eyes in the Public Schools of Philadelphia," being the report of the committee on examination of the eyes of the children in the public schools of this city. Dr. S. D. Risley, chairman of the committee, observes that among the questions of great interest which at the outset of this investigation presented themselves were:—

First. Would our more youthful civilization yield different results, regarding the percentage of increase in myopia, from those reached by European observers? This was important as tending to shed light upon the possible heredity of myopia. This latter could be fully answered only by a careful study of the family history of a large number of myopes. My statistics and the records of private practice have placed this within reach, but time has not permitted its development. The question, as stated, has received a decisive answer.

Second. Myopia having been found to increase during school life, did the increase come from the emmetropic eyes, while they were recruited *pari passu* from the hypermetropic? *i. e.*, did the eyes with hypermetropic refraction pass through emmetropia to swell the percentage of myopia? This involved the question as to which is to be considered the model eyeball.

Third. What relation, if any, existed between our educational process and the increasing percentage of near-sight, and to what extent were imperfections in our school system responsible for the increase?

These questions and many of secondary importance involved in them are summarized in the following conclusions, and are, we believe, fully justified by facts.

First. That the emmetropic eye is the model or standard eye, since emmetropia was shown not only to remain nearly constant in percentage throughout the school life, but that it was also the condition of health, and withal enjoyed the highest acuity of vision and the greatest freedom from pain.

Second. That myopia, or near-sight, commencing in the primary classes with a low percentage (4.27 per cent.), steadily increases as the pupils pass to the highest grade in our public school system; that the percentage of increase is very much lower in the schools of Philadelphia than in the schools of Europe; that the myopic eye presents a higher percentage of disease than eyes with emmetropic or hypermetropic refraction; that even in myopic eyes the percentage of disease is much higher when astigmatism is also present.

Third. That hypermetropic eyes are more numerous than both myopic and emmetropic combined; that, next to myopic astigmatism, distinct lesions are most prevalent in eyes with hypermetropic astigmatism; that the increase in myopia is from eyes with already existing anomalies of refraction—usually hypermetropic astigmatism—since it was shown that in hypermetropic, next to myopic astigmatism, was exhibited the highest percentage of disease, which also manifested itself in pathological changes similar to or identical with those usually regarded as characteristic of myopia.

This conclusion is strengthened by the fact that such change has taken place under direct observation. It is by no means necessary that the distending eyeball should first pass through emmetropia. In several instances I have had the opportunity of witnessing the gradual change from hypermetropic astigmatism to myopic astigmatism, the meridian of greatest curvature being maintained. Four of these cases were published in the *American Journal of the Medical Sciences*,

October, 1880. In one of these published cases a high degree of simple hypermetropic astigmatism passed through mixed to simple myopic astigmatism. Since the date of publication, the left eye has continued to distend, until at the present writing it presents compound myopic astigmatism.

Fourth. That, while there is an evident and close relation between the increase of myopia and the school life, nevertheless, the educational methods are responsible to only a limited degree.

This conclusion is supported by the fact so strongly demonstrated in this report, namely, the very obvious relation between the errors of refraction and the diseased conditions of the fundus oculi, which shows beyond dispute that the fault is not, primarily, in the system of education, however faulty this may be in many respects, but depends upon the defects which existed in the eye itself at the beginning of the school life. The conclusion, therefore, may be formulated as follows:—

That, given an emmetropic or normal eye, the probabilities are that no harm will come to it from the educational process. On the other hand, given an eye with an anomaly of refraction, especially astigmatism, the probabilities are, other things being equal, that the educational process will be fraught with pain and danger to the eye.

Therefore, that before entering school the possible existence of defective vision should be excluded.

Fifth. That the probability of harm resulting from the school life diminishes with every added year of age, in all states of refraction.

This conclusion finds strong support in the condition of even the emmetropic eyes in the primary schools, as compared with those in the higher classes.

Therefore, that our children are placed at school at a too tender age.

Sixth. That, in view of the facts herein set forth, the great importance of proper hygienic surroundings and a wisely chosen and arranged curriculum of study is more than ever manifest.

In arranging the course of study, the principle to be kept in mind is the avoidance of protracted use of the eyes at a near point—*e.g.*, in reading, writing, or drawing.

Quinine and Veratrum Viride in the Treatment of Pneumonia.

Dr. Chas. K. Gardner, of Laurinburgh, North Carolina, says, in the *North Carolina Medical Journal*, for April, 1881:—

In pneumonia, pyrexia of the system is always present in conjunction with an engorgement of the pulmonary structure. The great desiderata then are, control of both these pathological states, a diminution of temperature and the vis a tergo. No agents so readily accomplish this end, as quinia and veratrum viride. In the former drug we have an efficient antipyretic, which notably reduces the temperature, not only by lessening the afflux of blood to the heart, but by its diaphoretic properties. In the latter, we have an agent of inestimable value in the ready control of arterial action, which, however, must be administered with caution and observed scrupulously.

In the treatment (which has long been a *questio vexata*) of my last case, an adult, aged thirty years, I proceeded with a mercurial, followed by a brisk saline, in order to arouse hepatic secretions and relieve the primæ viæ of any fecal contents. Being then in the first stage, I ordered the application of a cataplasm, to which had been added ℥ ss sinapis alba, over the affected lung; at this period the heat registered 103° in the axilla. I then directed that grs. xxx of quinia be administered through the day, grs. x being given at intervals of four hours, and in conjunction, ordered the following:—

℞.	Tinct. verat. viride,		f. ℥ j	
	Tinct. opii.,	āā	℥ iss	
	Sodii. salicylat.,			
	Aqua pura,	q.s. ad	℥ iv.	M.

Sig.—Teaspoonful pro re nata.

This plan of treatment I adopted from the beginning of the attack, which was continued until the seventh day; subsequently, the veratrum viride was omitted and the quinine continued, however, in reduced doses. From the beginning of this treatment fever gradually diminished, gentle diaphoresis was frequently noticeable; expectoration became free, a diminution of dyspnœa, the patient resting well at night, and about the twelfth day resolution was complete and recovery rapid. This imperfect sketch embraces the happy result of this valuable mode of treatment, which I present to others of the profession, unacquainted with its great advantages, and beg of them a trial, feeling assured of their ample requital.

On Milk Analysis

Dr. E. F. Brush, of Mount Vernon, New York, who has been engaged in simplifying the analysis of milk, describes in the New York *Medical Record*, August 6th, 1881, the process he has adopted, as follows:—

I have a water-bath arranged with three funnels and one flask. In the first funnel I place milk, having previously coagulated the caseine with chloride of sodium; I boil the filtrate and throw it on the second funnel, to obtain the albumen. The second filtrate I precipitate with Fehling's solution, to ascertain the amount of sugar. From the residue in the first filter I wash the fat with ether. This ethereal solution I place in the flask. I wash the caseine with pure water, thus removing the salt. I then start my water-bath, which dries the three filters and expels the ether, leaving the fat. When these are dry, all that is necessary is to weigh the results.

As the other salts contained in specimens of milk are found to occur in only very small proportions, and as their significance, thus far, is of slight importance, I have not attempted to ascertain them with strict accuracy.

In testing with the lactometer, we are led astray both by the presence of water and by an excess of cream. I obviate these difficulties by first co-

agulating the caseine, and then taking the specific gravity of the filtrate. This, as you can see, removes both the sources of error. There is, I think, only one possible source of error in taking the specific gravity in this way—that is, the addition of salt may keep up the specific gravity of the serum. This can be eliminated, if one suspects its existence, by precipitating the chloride with nitrate of silver. Of course, a considerable amount of labor is required to obtain a standard. I have not done so. Having dealt in milk for years, I have relied on this test, and as our ingenious milkmen have not discovered it, I have not thought it necessary to guard against a fraud which might be perpetrated if the test were known.

The Surgical Treatment of Abscess of the Liver.

In a paper published in the *Annals of Anatomy and Surgery* for June, 1881, Dr. Randolph Winslow, of Baltimore, summarizes the results of his investigations in regard to the surgical treatment of abscess of the liver as follows:—1. The liver should always be aspirated in a case of suspected abscess, in order to verify the diagnosis. 2. Many small and a few large abscesses have been cured by one or more aspirations; hence this method should always be employed at the first exploration, and we should then wait until it refills. If the pus collects slowly and in small amounts, it may be again aspirated; if quickly and in large quantities, aspiration is not to be relied upon. 3. Incisions should be made into the abscess cavity at the most prominent portion of the tumor, whether in an intercostal space or not; and irrespective of the presence or absence of adhesions. 4. Rigid antiseptic precautions add much to the safety and certainty of a successful result. 5. When Listerism is impracticable, good results will generally be obtained by simple incision or puncture by a trocar and canula, followed by the introduction of a drainage tube, and the daily use of carbolized injections. 6. Any of these methods is preferable to leaving the case to nature.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. C. H. Hughes, of St. Louis, Mo., in a reprint from the *Alienist and Neurologist*, for July, 1881, treats of "Illusion, Hallucination, and Delusion." His paper is a differential study for forensic purposes.

——"The Management of Wounds," is the title of a well written pamphlet of fifty-four pages, by Dr. David Prince, of Jacksonville, Illinois. The author treats his subject in a comprehensive manner, beginning with a historical notice and giving full attention to various methods and their comparative value. The subject is further illustrated with nine wood cuts, and a complete index is appended.

——A paper on "Advancement of the Rectus" as one of the means of correcting strabismus, by A. E. Prince, of Jacksonville, Illinois, which comes to us in the form of a reprint from the St. Louis *Medical and Surgical Journal*, forms a valuable contribution to ophthalmological literature. This operation has not, we think, received the consideration it deserves. The method of performing and the indications which call for this operation are daily set forth.

BOOK NOTICES.

Clinical Lectures on the Diseases of Old Age. By J. M. Charcot, M.D., Professor in the Faculty of Medicine of Paris, Physician of the Salpêtrière, etc., etc. Translated by Leigh H. Hunt, B. Sc., M.D., Laboratory Instructor in Pathology in the Medical Department of the University of the City of New York. With Additional Lectures by Alfred L. Loomis, M.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York, etc., etc. Cloth, 8vo, pp. 280.

Coulson on Diseases of the Bladder and Prostate Gland. Sixth Edition, Revised. By Walter J. Coulson, F R.C.S., Surgeon to the St. Peter's Hospital for Stone, etc., and to the Lock Hospital. Cloth, 8vo, pp. 393.

These works constitute the volumes for June and July respectively, of Wood's Library of Standard Medical Authors, published by William Wood & Company, 27 Great Jones street, N. Y.

Diseases of old age, like those of childhood, form a distinct class, and should, therefore, be studied separately. Perhaps no institution in the world affords so great an abundance of material for observation in this special department as the Salpêtrière Hospital, and the publication of these lectures by a teacher of such acknowledged ability as M. Charcot must be regarded as a valuable addition to medical literature. The additional lectures by Prof. Loomis, which, he informs us, embody, in the main, the salient points in diseases of advanced life which he has been accustomed to impress on his classes at his clinic in Bellevue Hospital, greatly enhance the value of the work.

From a cursory examination of Coulson's work we are inclined to regard it as a very thorough and exhaustive treatise on this subject, which, from its importance, demands the special attention of every surgeon. The chapters on stone in the bladder take up more than two thirds of the volume, the various operative procedures, as well as the solvent treatment and preventive treatment being fully discussed.

THE

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THE LATER VIEWS ON MESMERISM.

Under the promising title, "The Secrets of Mesmerism," an English medical contemporary lays before its readers the reports of some cases from the wards of the famous Paris hospital for nervous diseases, the Salpêtrière, apparently under the impression that the phenomena attending these cases are identical with those produced by the mesmerist.

The writer states that if we wish proof that mesmeric phenomena are not produced by any "fluid," but are solely the result of "expectant attention," it is afforded by the success of such a method as seating the patient and making her look fixedly at something, a pencil or a silver pen-holder, placed between her eyes, which succeeds equally with any other. But patients who have been already frequently hypnotized, may be influenced much more rapidly and by still more simple means. Their own imagination plays the most important part. A patient at the Salpêtrière was so convinced of the power of one of the staff to "magnetize" her, that she fell, hypnotized, whenever she met him. With such predisposed patients, even simply extending one hand over their heads is sufficient to thoroughly hypnotize them. M. BOURNEVILLE having persuaded a patient that she could not leave the ward because he had magnetized the door-handles, when she touched them she fell down asleep. This illustrates how magnetized waters and magnetized trees have produced their effects. Magnetization at a distance is equally explained as the result of imagination. If one of their patients were told that M. X— was in the next ward engaged in magnetizing her, she would fall asleep. On one occasion M. BOURNEVILLE told a patient that, from his own house, he would cause her to fall asleep at three o'clock in the afternoon; and, on the following day, he learnt that, at three o'clock, she fell asleep. But M. BOURNEVILLE says that he did nothing at all; that he did not even think of the patient at the time when she supposed him to be exercising his mysterious influence over her, and that the result was entirely the effect of her own imagination.

There is no doubt but that these records are true, and that very many cases of mesmerism arise precisely as described, and are so to be explained. But does this exhaust the category? Are there no other factors in some of the instances which have been produced? Undoubtedly there are, and it is an unworthy prejudice to reject them because we cannot explain them so easily as we can the phenomena of hysteria major.

Many cases reported by HAIDENHAIN were not of nervous women, but robust men; not those expecting a definite event, but those not knowing what to expect. It has been, moreover, abundantly shown that certain persons can deprive themselves of the sense of pain by voluntary effort. Dr. FAHNESTOCK has reported, in the Boston *Medical and Surgical Journal*, a case or more, of women in confinement, who, by following out his directions, passed through parturition without feeling pain.

Then there is the curious phenomenon of "transvoyance," which we lately referred to as

having been demonstrated by Dr. Beard. This, we believe, was first clearly recognized by the Marquis de Puysegur, who named it "clairvoyance," about 1780. Undoubted instances of it were, indeed, recorded both before and after his time, but he was the first, we believe, to bring it into relation with the mesmeric condition.

As to the theory of a "fluid," that is neither here nor there. As a theory, it is no better nor worse than another. It does, in fact, not come into Mesmer's own explanation of the phenomena he exhibited. His own words on this point are: "The whole creation is in a mutual relation of its parts, through the medium of an ethereal substance. This substance moves rapidly, acts at a distance, is refracted and reflected like light, and can be antagonized by various substances."

It was the action at a distance—*Wirkung, in die Ferne*—which was most abhorrent to scientific minds, and which Goethe made game of in one of his prettiest minor poems. How Mesmer understood it, or whether he understood it at all, is a question which is not worth while going into here; certain it is that expectant attention will not explain all that has been shown as this action, unless we are ready to assume that the mind can be unconsciously expectant—a proposition perhaps not paradoxical after all.

In the revival of the interest in these and kindred obscure and curious appearances we may hope that the advanced science of to-day will succeed in elucidating the mysteries which so puzzled our predecessors; perhaps we may even be able to turn them to good account in furthering the main purposes of our profession.

To those who would pursue further investigations into the subject we would recommend the perusal of a very thorough criticism of its literature in a late number of Schmidt's *Jahrbuch*, (No. 4, June 30th, 1881). It is by Dr. P. J. Möbius, of Leipzig, and he enumerates ninety-two articles and treatises, over *sixty* of which have appeared since 1875. He believes that these phenomena by no means originated with Mesmer, but are clearly described in various ancient authors. Thus a Scotch physician, by name Maxwell, published, as far back as 1679, a treatise, *De Medicina Magneticâ*, in which there is no talk of actual magnets but of this peculiar power alleged to be exerted by one person over another.

SOME TESTIMONY ABOUT THE ENGLISH CONTAGIOUS DISEASES ACTS.

Under the pressure of well meaning but short-sighted persons, the House of Parliament appointed a committee to investigate the workings of the Acts which, in certain specified towns in England, place the public prostitutes under medical supervision. The testimony has been lengthy, and some of it evidently given under strong bias. One cannot, however, read it over carefully without being impressed both with the undoubted beneficial results of the Acts, not only on the male population, in diminishing disease, but on the women themselves, physically and socially.

Thus we may quote the testimony of the Rev. Thomas Puffield, who stated his conviction that the Acts had had a most beneficial effect on his town. Having been familiar with the locality before the Acts came into force, it was impossible not to be struck with the much more orderly condition of the streets, the diminished number of common women, and the more decent and cleanly appearance of such few as were now seen—a result he could not attribute to any other agency than the Acts, as all other police regulations remained precisely the same. The operation of the Acts was also a most valuable means of getting at the women with a view to their reclamation.

With regard to the oft-repeated statement, that it was unsafe for respectable women to walk about the streets, for fear of interference from the officials appointed to carry out the Acts, he said that, on the contrary, the order and decorum established in the streets now rendered it possible for respectable women to go out with perfect security. Moreover, he had always been known as one willing to assist those who had grievances of any kind, and particularly he was known as the champion of poor people; but he had never once, during all these years, had any complaint of an attempt to subject a virtuous woman to the workings of the Acts.

The reverend gentleman added that in supporting these Acts, as he did, he was taking a view quite opposed to that held by many other Congregational ministers, and no little loss of popularity was involved. But he was unable to resist the strong conviction that had forced itself upon him; and he felt sure that if other ministers had had his opportunities, and seen what he had, they would be of his opinion. Many of them, however, before they had given themselves time to study the operations of the Acts, had allied themselves with those who were already fixed in their convictions and could not act independently.

An examining surgeon under the Acts, Dr. Barr, gave his own experience decidedly in their favor, and declared positively that there had been no complaints from the women of harsh conduct on the part of the police engaged in carrying out these Acts. He made a point of asking the women, when they came before him, if they had any complaint to make, and he had never once heard of anything of the kind.

He remembered several instances of women (by no means common prostitutes, in the ordinary sense of the word) who had come into the district and voluntarily subjected themselves to the regulations of the Acts, in order to obtain the medical treatment they could not get elsewhere.

With regard to the reclamation of the women, he testified that everything possible, under the circumstances, was done to secure this, and the efforts were frequently successful.

The *Lancet*, however, has some just observations in this connection, meriting quotation. It says:—

It is one of the characteristics of modern thought, and would seem to be a striking trait of the most recent development of intense humanitarianism, that the pursuit of the highest good for the greatest number is peculiarly apt to be accompanied with intolerance of the need of special classes of the community. It is nothing to the impulsive reformer that human nature is, and always will be, so constituted that it must needs be saved from the consequences of its own wrongdoing. These optimist moralists will hear of no concession to weakness, and spurn the thought of conceding anything to the exigencies of our imperfect state. They would not have given so much as a cup of cold water to either of the impenitent thieves, and would have shrunk with horror from the prayer of the devils that they might pass into a herd of swine. Hagar might have perished with her ill-begotten babe in the wilderness. Jonah would have been left to die in the sun, and the manslayer might have been overtaken by the avenger, before one of the agitators against Contagious Diseases Acts, or any other provision for lightening the so-called "penalties of sin," would have striven to help them. The argument would have been, these thieves deserve their punishment, and it will encourage others if we relieve their sufferings. These evil spirits have no claim to our compassion, and we must, for example's sake, turn a deaf ear to their beseechings. If such characters as Hagar are relieved, and the children of their shame rescued from destitution, vice will be fostered. Those who take life must pay the penalty; it will increase the crime to reduce the punishment; even the disobedience of a prophet must be visited with its due recompense. This is precisely how the agitators argue against the Contagious Diseases Acts, against foundling asylums, and other measures to reduce the contingent social and personal effects and penalties of vice. It is no use trying to convince those who can find satisfaction in such reasoning.

We lay these facts and reasonings before the medical profession of the United States, that they may reflect seriously whether it is not their duty to speak out boldly in favor of similar measures in the large cities of our own country.

Notes and Comments.

A Novel Attempt to Produce Abortion, with Fatal Results.

At a recent Surgical Clinic at the Pennsylvania Hospital, reported in the *Medical Bulletin* for August, 1881, Dr. R. J. Levis drew the attention of the class to a peculiar case of suicide, occurring in a pregnant woman, or, perhaps, the case might be better called an attempt at abortion. She was in the ninth month of her pregnancy, and for some paltry reason endeavored to kill the fœtus, and so produce abortion by firing a pistol shot at the abdomen. The ball, instead of going into the womb, and killing the child, as she intended, entered the abdomen, near the margin of the seventh rib upon the left side.

The doctor was in the house when the woman was admitted, and saw that she could live but a short time. Upon examination, found that the beat of the fœtal heart could be distinctly heard, showing that although the mother was in a dying condition, the child was still living. He remained in the ward some time, with a view of endeavoring to save the life of the child, by laying open

the abdomen and removing the fœtus the moment the woman should die, but she lingered along for some time, and he was compelled to leave the hospital before she perished. On leaving the house, however, he instructed the Resident to perform the Cæsarean operation immediately after the death of the patient, to prevent, if possible, the child dying with the mother. During the night, however, while the woman was really in a dying condition, labor came on, and she succeeded in delivering herself of a living male child. The labor was a rapid one, its duration being only eight minutes. The mother died almost immediately after the delivery of the child was accomplished. The babe lived but a short time. There was no wound upon any portion of the child's body, which clearly showed that the fœtus was not injured, as the mother had intended, but that she had really killed herself in the attempt to produce an abortion.

Nitrite of Amyl in Fatty Degeneration of the Heart.

When the existence of fatty degeneration has been clearly diagnosed, it is injudicious to administer digitalis, as it might, by producing contraction of the smaller vessels, so augment arterial tension as to cause arrest of the heart's action. Under these conditions it is better to look for a remedy which will call forth the vitality of the muscular fibres which are still normal, and thus to wait for a time more favorable for the administration of the heroic remedy. According to *Rivista Clin. di Bologna* for January, 1881, Dr. E. Kutz, of Florence, believes that such an agent is found in nitrite of amyl, which he has for some years been accustomed to use in various nervous, painful, and spasmodic affections.

When pain is due to some abnormal condition of the nervous system the nitrite of amyl almost always gives prompt relief; if there be inflammation of the tissues its action is much more uncertain. In hysteria and epilepsy it should not be employed. It is more especially in the condition of cardiac debility, and commencing paralysis of the heart, that the remedy is of value. It produces peripheral hyperæmia, diminishes arterial tension, and at the same time causes the heart to contract. In support of his views the author cites the case of a patient who was restored from a condition of complete asystole by the inhalation of ten to twenty drops of the nitrite, till he was able to resume the taking of digitalis, from which, in its turn, he obtained benefit. The author thinks also that this remedy might prove useful in eclampsia and in most spasmodic diseases; the only contra-indications which he recognizes are cerebral hyperæmia, plethora, and atheroma, on account of the danger of causing apoplexy.

Treatment of Various Forms of Insanity by the Hypodermic Injection of Morphia.

Dr. A. Voisin, of La Salpêtrière, in *Bull. Gèn. de Thèrap.*, 15th and 30th May, 1881, records twenty-seven new cases of insanity successfully treated by the above means, in addition to those published by him a few years ago. He lays much stress on the fact that this method permits of treatment being carried out at the patients' own homes; of the twenty-seven cases fifteen were so treated. Of these fifteen, twelve suffered from melancholia with hallucinations, three from hysterical mania; while of the twelve hospital cases eight suffered from melancholia with hallucinations, four from religious mania, "the variety of insanity recognized as being the most difficult to cure." The maximum doses most generally employed were five to eight centigrams ($\frac{3}{4}$—$1\frac{1}{2}$ grains) per day, though in one case, sighing melancholia in a lady, a variety of melancholia considered nearly incurable, a maximum of sixty centigrams per day (9.2 grains) was reached. In all the cases a commencement was made with small doses (1 mgr.), which were gradually increased. The author commends this mode of treatment also on the ground that the physician has the assurance that the remedy ordered is properly taken, while the dose can be regulated with perfect exactness.

Boil Doubtful Milk.

It is with the following words that Dr. Pichon closes his account of the epizoötic of 1879 80:—Most authors are silent as to the quality of the milk yielded by cattle during the prevalence of epizoötics. It is possible that experience has not as yet supplied sufficient ground for its condemnation, and it is true that while a diminution of milk secretion is usually an early symptom in almost all diseases of the cow, complete suppression of that secretion accompanies any aggravation or prolongation of disease. The source of danger is thus removed by the operation of natural causes, and the discussion is narrowed to the question whether milk secreted at the very onset may not have acquired hurtful properties. In this state of uncertainty, which has not been cleared up by any authority on hygiene, the precaution of boiling the milk should be adopted. Boiling destroys any infective germs that it may contain.

Advice after Confinement.

Dr. J. Henry Bennett remarks, in a recent article: On taking leave of my patient, I say to the husband: "Your wife's confinement, being a natural function, ought to do her good. Two months after it she ought to feel at least as well, if not better, than before the pregnancy. She ought to walk and stand as well, to be properly menstruated, and to have no pains. If she do not attain this standard, send for me, and we will talk the matter over. During her confinement she may have received some internal injury, not appreciable at first, but easily recognizable later. Any such injury can easily be treated and cured a couple of months after a confinement. If, on the contrary, it be allowed to continue untreated for months or years, it will undermine her health; and when she is at last forced to apply for assistance, it will prove most difficult to cure." This advice was generally followed; and thus I save my own patients from the years of uterine suffering which often follow labors that appear, at the time, to be the most favorable, and in every sense satisfactory.

On the Indications for the Treatment of Naso-Pharyngeal Catarrh.

On this subject Dr. Andrew H. Smith expresses himself in the New York *Medical Record*, August 6th, 1881, as follows:—

First.—Keep the parts clean.

Second.—Remove all sources of irritation resulting from occupation, residence, climate, etc.

Third.—Enforce attention to hygiene and to the general health.

Fourth.—If there is obstruction to nasal breathing, remove the obstruction.

Fifth.—If there is ulceration, use strictly local applications, with a view to healing.

Sixth.—If there is hypertrophied glandular stricture, yielding excessive secretion, remove the hypertrophied portion.

Seventh.—If, after the above indications have been fulfilled, there is still hyperæmia, use mild astringents and sedatives, and such constitutional treatment as is thought to be indicated.

Eighth.—Cease treatment the moment there is no longer a definite indication for it.

Is Cancer Hereditary.

Professor Jonathan Hutchinson, says, in a recent lecture that the popular opinion to the effect that this distressing disease is always transmitted to the offspring of cancerous individuals is not supported by the conclusions arrived at by those who, like Sir James Paget, Mr. Birkett, Mr. Morrant Baker, and others, have specially investigated this question. Indeed, it has been shown that only one out of every *six* cases is due to direct inheritance, and we should be led to anticipate this from the knowledge we possess that cancer (including under this head all forms of malignant new growth) is a disease of old age especially; and it has been already conclusively demonstrated that the more certainly transmissible complaints are such as occur in early life, those of advanced age being among the more rarely inherited forms.

Glycerine in Phthisis.

Prof. Jaccoud, of the Paris Faculty, has strongly recommended (*La Thérapeutique Contemporaire*) the use of glycerine as an excitant and agent d'epargne, during the non febrile period of common phthisis, when cod liver oil is no longer tolerated. He recommends the following mixture, which should be taken in the course of the day, either with or between meals:—

℞.	Rum or cognac,	10 grams
	Ol. menth. pip.,	♏j
	Glycerin,	40 grams. M.

This mixture is agreeable to the taste and well tolerated by the stomach; even after several months, it induces neither satiety nor disgust. The quantity is sufficient for one day, but in cases which present no sign of abnormal excitability of the nervous system or heart, the dose of glycerine may be gradually raised to 50 or 60 grams per diem.

Treatment of Syphilitic Chancre.

In a recent memoir on the "Diagnosis, Prognosis, and Treatment of the Syphilitic Chancre," M. Mauriac, of the Ancient Hôpital des Veneriens, of Paris, arrives at the following results as regards treatment: Notwithstanding the authority of Sigmund, of Vienna, cauterization is not approved; it will always be difficult to do it soon enough. As regards excision, which, according to Auspitz and Unna, Ch. Kolliker, etc., has arrested the progress of syphilis, even the first or second week after the chancre has appeared, this operation merits very little confidence. If the prepuce is long and narrow, and with difficulty drawn back over the glans, circumcision may be performed and the chancre and constricted prepuce removed at the same time.

M. Mauriac believes in using mercury in fair doses and for a considerable period.

Visceral Rheumatism.

At a meeting of the Academie de Médecine, M. Woillez read the report of a work by Colin, upon visceral rheumatism. Along with others, the author found that pleurisy of a rheumatic nature could be distinguished by a peculiar friction sound, having for seat the junction of the superior with the middle third of the axillary region. This symptom M. Colin considers as indicating an arthritic affection, although the patient may not have had previously any rheumatic trouble. The friction sound resembles the dry crepitation of the first stage of pulmonary tuberculosis, and is especially marked on the right side. The sign appears to him symptomatic of all pulmonary affections of an arthritic nature.

Special Reports.

NO. XV.—DERMATOLOGY.

(*Concluded from page 220*).

Pityriasis Capitis.

For this common and frequent affection we quote the treatment adopted by Prof. Oscar Simon, of Breslau (*Allg. Med. Cent. Zeitung*, June, 1881). He praises the local application of *chloral hydrate* :—

℞. Chloral hydrat, gr. xxv
Glycerinæ, ℥j
Aquæ, ℥j. M.

To be rubbed into the scalp once or twice daily with a soft sponge.

In obstinate cases, half a grain to a grain of corrosive sublimate may be added to the above.

Prof. Simon very pointedly warns patients with this complaint against using harsh brushes, especially the American wire brushes, and all violent rubbing and scratching with fine-tooth combs. All these procedures, he adds, are poisonous to the scalp. The head may be washed from time to time with glycerine soap, or, if a more positive agent is needed, with a tincture of green soap (spiritus saponis alkalinus). If the case remains refractory he has recourse to

℞. Olei rusci.
Alcoholis āā q. s.

which effectually prevents the formation of scales. As a useful ointment to prevent the return of the disease may be employed :—

℞. Bismuth subnit.,
Hydrarg. præcip. alb., āā ℈j.
Unugent. petrolei, ℥j.

Used from time to time as required.

Prurigo.

The *Centralblatt für Chirurgie*, No. 9, 1881, states that Prof. Neumann, of Vienna, holds that while recovery from true prurigo is extremely rare in adults, it is not uncommon in children. To obtain this result treatment must be begun early and continued unremittingly ; the itching being lessened or removed the secondary changes (infiltration of the skin, desquamation, the formation of fissures, swelling of glands) may be prevented, and a cure may be obtained, often after ten or twelve years' treatment ; even then relapses are apt to occur. As regards remedies, Neumann recommends the hypodermic injection of *hydrochlorate of pilocarpine*, wet packing, and vapor baths, to induce profuse perspiration. The author incidentally remarks that in cases of alopecia areata pilocarpine had no effect on the growth of the hair.

Prof. Oscar Simon (*Allg. Med. Cent. Zeitung*, May, 1881) emphasizes the diagnostic points that true prurigo is found on the extensor surface of the limbs, and not in the flexures of the joints ; that prurigo buboes in the crural region are rarely absent, and that it dates from childhood. He has also found positive benefit from jaborandi and pilocarpine. He uses daily an injection of one gram of a one per cent. solution of pilocarpine. The patient is then covered with blankets and allowed to sweat one or two hours. A syrup of jaborandi, prepared from the leaves, may also be administered. The cure lasts three or four weeks. In addition to the pilocarpine, the patient may be painted with cade oil and put in a warm bath for a couple of hours. This may be carried out in the afternoon.

Psoriasis.

The treatment of Prof. Guibout, of Paris, is, internally, *aerseniate* of *soda* in solution or pill, continued for several months ; and locally pyrogallic acid and oil cade.

℞. Olei cadini. gr. xl–l
Adipis, ℥j. M.

Rub in twice a day, the skin being washed with warm water and soap every two days.

But oil of cade is a better application ; it is rubbed in, pure and simple, twice a day, the skin being bathed every two days with a strong solution of bicarbonate of soda.

Very obstinate case of psoriasis were treated by Dr. Voss, of Pesth, by baths containing in solution *corrosive sublimate* (*Bull. de Thérapeutique*, March). The number of baths required varies from thirty-two to forty-eight. The baths should be taken every day, at a temperature of 27° to 29° C., the patient remaining immersed 30–40 minutes. The strength of the solution forming the bath is not indicated here. Neither salivation nor any accident of that nature was observed. This system of treatment commends

itself on account of the shortness of its duration, the ease with which it can be carried out, and its pleasantness, the remedy employed being neither evil smelling nor such as will stain the skin or clothing.

The *Union Médicale* states that Dr. PREISSMAN uses *salicylic acid*.

℞. Acidi salicylici,	gr. xxx	
Alcoholis,	℥j.	M.

Wet a soft sponge with this and rub gently the diseased parts; the scales will soon become detached, after which an appropriate ointment may be applied.

A writer in the *British Medical Journal*, June, gives an example of his plan of treating obstinate psoriasis:—

I cured a most inveterate case that came under my care, after having been getting worse and worse under various treatments at the hospital. The sufferer was literally covered, from her chin to her instep. I began by giving three grains of potassa sulphurata, and three minims of liquor potassæ arsenitis, in an ounce of water, three times a day; and as I found it borne well, increased the dose of potassa sulphurata to eight grains and the arsenic to ten minims; and had the satisfaction of seeing the case perfectly cured in a few months. Two years afterwards she had a relapse; but by taking it in time, it was soon cured, and this spring she again came with it out rather fully; and again, in two or three weeks, it was cured.

Dr. THIN (*Lancet*, April, 1881) has successfully treated cases of psoriasis by the application of a solution of *pyrogallic acid* of the strength of one in twenty. Dr. THIN believes that the curative action of pyrogallic acid is due simply to its irritant qualities and to certain properties as an irritant, in regard to which we are at present ignorant. The irritant effects are most conspicuous around the hairs, each hair being the seat of a small brown patch, which, when it is scratched off, often leaves an abrasion in its place. Dr. THIN concludes that pyrogallic acid is a remedy to be cautiously handled, but that when used in the strength above indicated, and over a small extent of surface at a time, it can be employed not only safely, but conveniently and successfully. The utility of pyrogallic acid in psoriasis has also been supported by the testimony of KAPOSI, who has warmly recommended it, more especially in cases of psoriasis universalis.

It is however far from an entirely safe agent. An account is given by Dr. A. NEISSER, in a recent number of the *Annales d'Hygiène Publique*, of poisoning by an ointment containing pyrogallic acid:—

A man of strong constitution was admitted into the dermatological ward of the Breslau Hospital, suffering from general psoriasis. He was treated by frictions with chrysarobin (in the form of an ointment of alcoholic extract of rhubarb, containing 1-20th) on one-half of the body, while the other half was treated in the same manner by an ointment containing ten per cent of pyrogallic acid. Six hours after the application the patient had violent shivering with vomiting and intense collapse. He then recovered somewhat, but the symptoms reappeared in forty hours. Death occurred on the fourth day after the application of the ointments, preceded by coma and a very low temperature. Experiments undertaken at once on rabbits proved that this catastrophe was due entirely to the pyrogallic acid ointment, and that the chrysarobin was entirely innocuous. The pyrogallic acid acts by its extreme avidity for oxygen when in contact with alkaline fluids. The patient during the whole time he was at the hospital produced very little urine. The last quantity voided was dark brown and very thick; it contained no blood corpuscles, but a considerable amount of hæmoglobin, which was recognized by means of the absorption-bands it gives in the spectroscope. *Post-mortem* examination showed that the blood had a dirty brownish-red tint, and contained an abundance of *détritus* of red corpuscles. The kidneys were uniformly bluish black. In some of the experiments on rabbits the animal died within two hours.

The use of *chrysophanic acid* in psoriasis has been less extensive than was anticipated, owing to its irritant action. It has, however, very good results at times. Dr. CHARTERIS, of Glasgow, has found that if applied to one side of the body only, it will often effect a complete cure of both sides. Such a case is recorded in the Glasgow *Medical Journal* for July. A boy of nine years had psoriasis of the whole body and scalp.

Dr. CHARTERIS ordered the patient to be treated with chrysophanic acid ointment (grs. 40–℥j), which was to be applied in the following manner: One ounce to be rubbed on the left side and on the left arm and leg, the side to be covered by a broad bandage, fixed on by tapes carried round the right side, and the left arm and leg to be bandaged and protected further by a sort of sleeve. The right half of the body not to be interfered with in any way. By 11th May the itching had disappeared. May 16th. The scales are entirely rubbed off the left side, and seem to be looser on the right side. May 20th. There is some slight desquamation in the left axilla, and the eruption has left the arm. On the body there is a great improvement. May 23d. There are only a few discolorations noticeable on the right leg. The ointment is to be stopped and a bread poultice applied to the remaining spots; this is to be followed up with a bath. May 26th. The eruption has now left the patient entirely. He has been under treatment fifteen days, and during that time none of the ointment has been allowed to get on the sheets or in contact with the right side of the body.

This curious result shows that the acid is absorbed and acts through the system generally.

Rosacea.

Prof. SIMON, of Breslau, is convinced that for most cases of rosacea there is but one means worth resorting to, and that is to slit up the swelling, so as to relieve the enlarged capillaries. If this is done skillfully little or no pain attends the operation, and the ugly redness disappears. No caustic is needed, and the hemorrhage in most cases is slight, and beneficial rather than otherwise. As in men this disease has its origin generally in some form of dyspepsia, and in women either in stomach or uterine complaints, these conditions should receive proper attention. The circulation should further be stimulated by local bathing with alcoholic washes, or painting with a weak sublimate wash, as

℞. Hydrarg. chlor. corrosiv., gr. ss–j
Aquæ destillatæ, ℥j. M.

Carbolic Acid in Scabies.

As the result of experiments by M. FRISSART, at Saint Louis Hospital, Paris (*La Presse Médicale Belge*), it appears that carbolic acid may be employed with advantage in the treatment of scabies. Two patients were cured of the affection by friction twice a day with the following mixture:—

℞. Acid. carbolic. cryst., gr. xliv
Ol. amygdal. dulcis, ℥ x. M.

Dr. FRISSART was led to make these experiments by noticing the disappearance of scabies in several patients affected with it who had been put under Lister's treatment for some surgical affections.

Urticaria.

The remarkable sensitiveness of the skin in those subject to urticaria is well illustrated in a case reported from the Charing Cross Hospital by Dr. SANGSTER (*Medical Times and Gazette*, June 25th):—

E. B., aged sixteen, female. For the last ten years it has been noticed by the patient's mother that trifling mechanical irritation causes the skin to rise up in wheals; this was not remarked during infancy. No medicines or food causes the wheals to appear, nor do they ever come spontaneously. After drawing a blunt-pointed pencil (using moderate pressure) across the skin once, within two minutes there appeared a hyperæmic surface, extending more than half an inch on either side of the pencil-mark, which became the seat of an elongated pale wheal. An ordinary clinical thermometer, after being held against the normal skin for some time, until it ceased to rise, at once went up 3° on being held against the hyperæmic surface. There was no other abnormal condition of the skin present. The extremely irritable condition of the vasomotor system, giving rise to the ready production of wheals from slight mechanical irritation, seems to be present in some individuals during the whole or a considerable part of a lifetime. It may be supposed that these extreme degrees of irritability of the vasomotor system (and the degree must vary in each individual) play an important part in the sum of causation of skin affections. The condition giving rise to "factitious" urticaria is undoubtedly, in some instances, temporarily induced by causes which give rise to scratching. Dr. LIVEING notices this. He says: "Urticaria is extremely liable to complicate other irritable affections of the skin, such as scabies and pytiriasis." In these conditions the extreme irritability of the vasomotor system is probably due to exhaustion; the system is exhausted by continued stimulation, and therefore unduly mobile.

In regard to the treatment of this disease, in the *Bull. de Thérapeutique*, April, 1881, Dr. CATRIN reports three cases of urticaria treated with considerable success by *atropine* in pill. His formula is the following:—

℞. Atropin., 10 milligrams.
Glycerini, 2 grams.
Aq. dest., 2 "
Pulv. gum. trag., q. s. M.

SIG.—Make ten pills: one morning and evening.

The good effects of atropine in urticaria are attributed to its influence on the vasomotor nerves, its action being analogous to that by which it controls the night-sweats in phthisis.

A curious instance of *urticaria tuberosa* was lately related to the Royal Medical and Chirurgical Society of London, by Mr. W. M. BAKER:—

The general symptoms from which the patient suffered were those of factitious urticaria, to which were added those of so-called urticaria tuberosa. The most peculiar feature of the case, however, and one which, in the author's experience, was unique, was the presence of persistent, yellowish-red tubercles in various parts of the body, which proceeded to ulceration; the parts most affected being the knuckles, elbows and ears. These tubercles were said to have begun in a manner similar to that which characterized the onset of the evanescent urticaria wheals and tubercles. The patient's general health was good, and he had not suffered from syphilis or other serious malady. Under the influence of treatment as an in-patient, the disease became rapidly better, but soon relapsed when the patient left the hospital. The author considered briefly the doubtful relationship of the disease to others less rare, which in some respects resembled it; and came to the conclusion that the case was one of so called urticaria tuberosa.

Muriate of Iron in Chronic Diseases of the Skin.

Dr. CASSARINI has collected a certain number of observations of chronic disease of the skin, in which the external employment of the muriate of iron had been of incontestable utility. He

employed the dose of thirty orf orty drops, in the form of lotions or mixed lard, as an ointment. The diseases of the skin in which this agent appeared to be the most efficacious are subacute and chronic psoriasis, eczematous lichen, and in eczema when all inflammation had disappeared.

The conclusions of the author are as follows:—

1st. Perchloride of iron is the most active remedy against purpura hemorrhagica and simple purpura.

2d. It is very useful against the cachectic chloro-anæmic state which frequently accompanies certain diseases of the skin, rhypia, ecchymosis, and impetigo.

3d. Externally it exercises a prompt and favorable action in scrofulous and syphilitic ulcers (constitutional syphilis).

4th. Employed as a pomade, perchloride of iron is an energetic remedy against squamous affections of the skin, notably psoriasis.

Iodoform in Skin Diseases.

The following formula is in use at University College Hospital, London:—

℞.	Iodoformi,	gr. x
	Olei eucalypti,	ʒj
	Unguent. petrolei,	ʒj. M.

Dr. H. Crocker says of it (*Brit. Med. Jour.*, May 28).

I have used the iodoform without the eucalyptus with success in some cases of subacute eczema, mainly on the back of the hands and forearms; in suitable cases, the result was often very rapid. I have now a boy under my care with eczema of the head, in which there was a profuse sero-purulent discharge, which became offensive in a short time; to this, an ointment, with ten grains of iodoform to the ounce of lard, was applied, speedily removing all fetor, and reducing the discharge to serous only. It was, however, rather too stimulating at this stage to be continued long. Its penetrating and disagreeable odor necessarily limits its employment, though the oil of eucalyptus partially obviates this, besides increasing the solubility of the iodoform. It is stightly stimulant as well as antiseptic, and must, therefore, be restricted to cases requiring some stimulation. I can well believe that it would be efficacious in impetigo contagiosa, by destroying the micro-organism on which the inoculability of the disease probably depends; but the less unpleasant ammoniated mercury ointment will be preferred by most, as it is so very efficient.

Cutaneous Lesions of Nervous Origin.

At a recent meeting of the Société de Biologie, May 7th, MM. Leloir and Dejerine presented a patient affected with a malady which must be rare, for it is nowhere described. A young girl of a family having several members affected with nervous diseases had, without any apparent cause, several patches of superficial gangrene developed on the cheeks; the small eschars were soon eliminated, leaving a linear cicatrix, which gradually became transformed into cheloid elevations. This first happened three years since, and during this period she has suffered from several similar lesions on the trunk and arms. The lesion commences on the skin, by a sensation of pricking, with slight redness and notable diminution of sensibility at this point; in nine hours a white patch, not preceded by phlyctenula, is formed and undergoes, after a short time, superficial gangrene. Later the spot becomes brownish, detached at the edges, and is finally eliminated, leaving an ulceration and a cicatrix, the anæsthesia which existed around the part finally disappearing.

Every fortnight a new series of patches appears; for the past three weeks M. Vulpian has administered atropia and chloride of gold, and there seems to be some amelioration.

M. Poncet was of opinion that this was a case of leprosy, resembling those proteiform cases to which M. Bazin has given the designation leproid; the abnormal fact in this case would be the return of sensibility around the cicatrices.

Correspondence.

Carbolic Acid in Hemorrhoids.

Ed. Med. and Surg. Reporter:—

In the number of your journal bearing date July 23d, 1881, I find an article signed G. Law, M.D., inveighing against the use of carbolic acid injections in treating hemorrhoids. The writer condemns the whole process from the results attained in only one case, and that one not suited to the operation. The tumors, as he found them, very small, "soft, exceedingly tender, protruding from the anal orifice," were not such as I would have felt warranted in operating upon at all for some time. The first step, in such a case, ought to have been to have subdued the inflammation, which at that time had certainly passed the reparative degree and was tending rapidly to that of suppuration. The teaching of all authorities, in such cases, is to first deplete and subdue the local inflammation by leeching, poultices, emollient injections, etc.; then, when the active stage of the inflammation is passed, to select that mode of operation best suited to each individual case. It is not claimed for the operation of injection, by its advocates, that all hemorrhoids are curable by it. Only internal tumors should be treated with it, and only such internal ones as are in a proper condition for the injection. From the result of the operation in the case of the second tumor by him injected, I am inclined to think that the hemorrhoids were partly external and partly internal; and, if so, only suited to the knife or scissors. Had the tumor been entirely internal, and as small as reported

by Dr. Law, I can see no reason why it could not have been returned; but, if partly external; then the failure to return can be easily accounted for. Now, if Dr. Law failed in a case unsuited to the operation, he ought not to condemn the operation itself but some one or some thing else. It is a maxim of surgery that the only operation for an external hemorrhoid is excision—not injection or ligation. In my experience in the treatment of hemorrhoids, I once saw an external tumor that had been ligated which came near causing the death of the patient; so, too, can I conceive that the injection of carbolic acid into an external hemorrhoid, or one only partially so, may cause intense pain, lasting for hours, and "necessitating a hypoderm of morphia." Furthermore, where the internal tumors are small, it is very easy to inject the solution too deeply, and no good results follow. In such cases the coats of the bowel can easily be perforated. Then, again, a fifty per cent. solution of carbolic acid is hardly strong enough to be used with safety. Weak solutions are more often followed by suppuration than the stronger ones. The first effect of the injection being coagulation, the more rapidly this takes place the safer, as the danger from absorption of the acid then becomes almost nil. Suppuration follows only in just such cases as that reported by Dr. Law.

In the cases in which I have resorted to the carbolic acid treatment, I have not hesitated to inject all of the tumors at one time, but this would not be a safe rule to follow in all cases. The cases were chronic and long standing ones, of strictly internal tumors. One of them reported his trouble of thirty years' duration. The result in *every* case has been a *perfect* cure. The first case I operated on by this method was three or more years ago, and from a daily observation of the patient I know the result to be all that could be desired. Another case, after a year's test, reports himself "as well as he ever was in his life," and so for the other. In no case was there suppuration; in no case was chloroform, or any other anæsthetic used, and in no case was much pain produced. The general complaint was, that at the moment of operation a sensation similar to that of a bee-sting was produced. In only one case did I have to administer an opiate, except to keep the bowels from moving for a few days. Can the advocates of ligation show any such results? Have there been no deaths from such operations as ligation and excision? I answer the latter question affirmatively, but not in my own practice. I have seen such results follow. One great trouble with surgical practice is that "dead men tell no tales," and surgeons do not report fatal cases. Could all fatal cases be collected, resulting from ligation or excision, the number would, I doubt not, be large. After ligation a strangulated mass is returned into the rectum, there to remain and slough off, the system being in danger from septic poisoning during the progress of sloughing, and then from secondary hemorrhage, and then from a slow healing, and occasionally a never-healing, ulcer. The danger from septicæmia is far greater than any imaginary danger from carbolic acid poisoning, as no absorption takes place when used in proper strength. There is, and can be, no danger from secondary hemorrhage, and you have no slow healing ulcers, except in such cases as Dr. Law reports.

One further criticism. From the progress of the Doctor's case, I am inclined to the belief that carbolic acid was injected, not alone into the tumor, but into the surrounding tissue also, and hence the deep-seated pain "and uneasiness about the anus," and the gloomy "image of a possible rectal fistula to follow." If, as one would infer from the article, Dr. Law operated on the rectal fistula as soon as it fully revealed itself to him, an image of a probably sloughy condition of the wound, and one that will heal with great difficulty, may yet loom up before him. Upon the whole, it is hardly fair to condemn an operation because of one failure, where hundreds of successes have been reported.

Trenton, Tenn. T. J. Happel, M.D.

Ice in the Treatment of Typhlitis.

Ed. Med. and Surg. Reporter:—

Dr. T. Curtis Smith has given a very valuable paper on this subject, in the Medical and Surgical Reporter of July 30th, and as I regard everything that he writes as worthy of careful reading, and as being greatly instructive in *practice*, I desire now only to suggest to him and to those who have read his valuable paper a remedy which will not only obviate the necessity for his blister, but which, besides its great efficacy in reducing the local inflammation—which in this case is the whole disease—is so grateful to the patient during its action. I need not refer here to the symptoms of this disease; its progress, its dangers and terminations. These have all been well given by Dr. Smith.

Many years ago I had a young friend ill with this disease, and under my care he died It gave me unutterable sorrow, and when, a few years after, I was called to a boy eleven years old, suffering greatly, lying on his back with his legs drawn up, and a large, firm lump occupying the region of the ileo-colic valve, I had a heavier rigor than those which have so alarmed President Garfield's physicians. The sad case of my young friend was before me, and what I had done for him had failed of its purpose. I concluded to call to my aid my brother, Dr. William Corson, and together we considered the case. Without caring about the name of the disease, but regarding the swelling, tenderness, and pain, and their location, we agreed that there was an inflammation—a very severe one, too—at or about the junction of the large and small intestines, and if we could not arrest that inflammation our patient would likely die, as mine had done, after sloughing of the bowels and discharge of their contents externally through the muscles of the side, or back. Leeches were suggested, but we had both seen the wonderful effects produced by covering the inflamed, tympanitic belly of a puerperal woman, suffering from peritonitis, with snow, and continuing it there for two days. It gave her almost immediate relief, with steady, regular abatement of suffering, until out of danger. The inquiry then was, "Why not use

it here?" Though we had not known it used in such a case, we at once got a large bladder, filled it half full of ice, with water enough to have it rest like a cushion over the inflamed and suffering part, gave opium; to allay pain, and left him. Next day found him better; not so sore; not so much pain; no extra heat that we could feel; the tumor smaller; the patient not restless, but comfortable with his ice cushion. In a few days the boy was well. Since that time—a quarter of a century ago—in all inflammations of the belly, I have resorted to it. In erysipelas, when so prevalent in Norristown, many years ago, it was a soothing, efficient remedy when the disease spread over the back, belly, or side, as the case proved to be. Recently, in fevers—typhoid, and other, I have used the cold with great comfort and advantage to the patient. Only three weeks since I kept the belly of a boy of ten years, covered with towels wrung out of ice water and changed every fifteen minutes for several days, with comfort to the little fellow. A month since, I used the same remedy, in the same way, in a boy of eleven years, ill with pneumonia. After a week, when he was well, I asked him how the cold applications affected him. He replied: "It felt very cold the first time, but after that it was very pleasant; it cooled me off so well; my side was so hot before."

I seem to have wandered from the subject treated by Dr. Smith, but I desire to encourage others to make use of cold water, or ice, instead of whisky and large doses of quinine, when they desire to reduce the heat of a part, or the whole of the body. If, hereafter, he will, in his cases of typhlitis, and all other acute inflammations of the abdominal organs, apply ice over the affected part freely and continuously, he will need but few if any other remedies than opium.

Conshohocken, Pa. HIRAM CORSON, M.D.

Pharyngeal Inflammation.

ED. MED. AND SURG. REPORTER:—

I ask a place in your Correspondence for the following history of one of my patients:—

N. E., æt. 28, married ten years, has had three children; been troubled with attacks of sore throat ever since she was a girl; is anæmic; menstruates about every five weeks, flow lasts never less than six days, and is so painful that she has to keep her bed the first day or two. This woman came to me to be treated for her throat trouble. She says her throat gets dry, and at times she brings up small lumps about the size of a pea, looking like inspissated mucus, and that afterwards her throat feels better. I examined one of these lumps, and it appears to be the dried secretion from one of the follicles in the pharynx. Upon inspecting the pharynx, I find the parts relaxed, not congested. tonsils slightly enlarged, and little pits on each side of the pharynx, one of which is the shape and size of the little lump the woman gave me for my inspection. Those pits do not look as though they were the results of inflammation or had been made by the disorganization of the tissue which may have formerly occupied their place; the pits appear to be covered or lined by a continuation of the same membrane that lines the rest of the pharynx, and there is no evidence of *active* inflammation about them. Those pits or depressions look as though they might have been made by a gouge or sharp instrument, only that there is no evidence of violence about them. What is particularly curious about this case is her loss of sexual appetite, which is a source of unhappiness in her married relations. The prescription that did her the most good is:—

℞. Dialysed iron, ℥j
Glycerine, ℥iij. M.
SIG.—Take a teaspoonful three times daily.

Her throat gave her less trouble while taking this than any other. Now the inquiry that most interest me is, first, whether the follicular ulceration of the pharynx or the anæmia, together or separately, had anything to do with her loss of sexual appetite; and, second, What remedies are best adapted to relieve both difficulties? I would like to have an opinion from the profession on these questions, and some of their experiences with such cases. I do not think the sexual complication in those cases should be ignored. Such sexual disparities as the above are, I verily believe, the source of more than half the domestic infelicities that afflict the human family in civilized society. E. H. N.

[The case is no doubt one of chronic follicular pharyngeal inflammation. The relation not unfrequently observed between diseases of the throat and the sexual powers has been commented upon at some length by Acton, in his work on the *Reproductive Organs*, and Napheys, in his *Transmission of Life*. Local applications of glycerate of tannin and general tonic measures usually relieve such cases. A month or two at a sulphur spring is a most excellent adjuvant.—ED. REPORTER.]

Hemorrhage from the Bowels in Typhoid Fever.

ED. MED. AND SURG. REPORTER:—

This is not in the strict sense of the word a hemorrhage, that is, "a breaking forth of blood as from an aneurism;" but a simple transudation, in most cases, from a want of tone in the tissues, in consequence of which the blood leaks away after the manner of a transudation through a flannel cloth. Of course, there are cases arising from ulcerative destruction of the coats of vessels; but I apprehend these cases are rare, in comparison with those due to the former course. But it is my object simply to give the method of treatment that I have found most satisfactory. As I derived it, many years ago, from an old practitioner, of local eminance, and have never seen it referred to in any book or medical periodical, I conclude that it may have originated with the physician referred to, and is not as widely known as it merits would justify.

This consists simply in the use of lime water and Peruvian bark, as follows:—

℞. Peruvian bark (best), pow'd, ℥j
Aquæ calcis, Oij. M.

Put the powdered bark into a quart bottle, fill it with lime water, shake it until thoroughly mixed, and throw into the bowels by one injection, Oj. Direct the patient to retain this, which he will frequently do for twelve hours; when it should be at once repeated. At the same time administer by the mouth a tablespoonful of the same mixture every two or three hours. This should be kept up until the bleeding is thoroughly arrested. T. M. Harris.

Ritchie C. H., W. Va.

Plan for Probing for Bullets.

Ed. Med. and Surg. Reporter:—

There seems to be so much perplexity with regard to "locating the ball," in the President's case, that I am tempted to give a method which I have practiced, upon occasion, during the last fifteen years. It may not be new, but if it is not, I confess my ignorance when I state that I have not seen the method anywhere alluded to. You have reason to suspect the presence of the ball at or near a certain spot, but are unable to demonstrate, by any of the ordinary modes of search, that you are correct. Take a long, slender, steel needle, about the calibre of a number 4 or 5 sewing needle, fix it firmly in the end of a slender handle, say about the length and size of an ordinary pen holder or staff. You now have a "probe" with which you can with great delicacy distinguish between the touch of flesh, bone and lead, or other foreign substance. To distinguish between *bone* (healthy bone) and *lead*, however, requires a little practice.

The manner of using this improvised "probe" (I have usually constructed it of a common sewing needle) is to pass it vertically down through the tissues over the spot where the ball is supposed to be. If the operator be possessed of ordinary skill he will readily perceive when the point of the needle comes in contact with the leaden substance. It will be seen at once that the wound inflicted by the needle is too small to do any serious damage, even though it should pass through tissues of great delicacy, and that it can be used where all ordinary methods of search would be unavailing.

My first use of it was to find a ball in the neck, behind the subclavian artery and vein, and the brachial plexus, lying on the posterior scalenus muscle. I have used it in other situations of delicacy with satisfaction to myself and benefit to my patients.

Prof. Bell may be able to attach this contrivance to his electric apparatus in such a way as to effect better results than either would do alone.

Trenton, Tenn. J. P. McGee, M.D.

News and Miscellany.

Statistics of Medical Literature.

At the International Medical Conference, in London, Dr. J. S. Billings, of Washington, D. C., read a paper upon medical literature, with especial reference to its character and distribution. The paper opens with the following statistics:—

It is usual to estimate that about one thirtieth of the world's literature belongs to medicine and allied sciences. The number of volumes is computed to be about 120,000, and about twice that number of pamphlets, and this amount is increasing at the rate of about 1500 volumes and 2500 pamphlets annually. Out of the 180,000 medical men in the civilized world about 11,600 are producers of or contributors to this literature. These are divided among the different countries as follows:—

	Number of physicians.	Number of medical writers.
United States	65,000	2,800
France and colonies	26,000	2,600
German empire	32,000	2,300
Great Britain and colonies	35,000	2,000
Italy	10,000	600
Spain	5,000	300
All others	17,000	1,000

The number of physicians who are writers is proportionally greatest in France and least in the United States. In 1879 the total number of medical books and pamphlets published was 1643, according to the *Index Medicus*. Of these France published more than any other country, the contributions of the United States ranking third. The special characteristics of the medical literature of the present day are largely due to journals and transactions of societies. These form about one-half of the current medical literature, and are by far the most widely read and studied. They amounted in 1879 to 655 volumes, containing about 20,000 original articles which were judged worthy of notice in the *Index Medicus*. Classifying the literary product of 1879 by subjects, we find the scientific or biological side of medicine represented by 167 books and 1543 articles. In this branch Germany leads, while the United States is very low in the list. The practical side of medicine was represented by 1200 books and 18,000 articles. Here France showed the greatest production, the United States next, and then Germany. In scientific medicine we go to Germany to school, as that country at present leads the world. It was not long ago that the scientific student of medicine found his career anything but a profitable one. This condition is, however, rapidly changing, with the increasing specialization of his profession, and with the general tendency of science toward achieving practical results. So vast is the present range of medical science that we must now look, for original discoveries, mainly to specialists.

The Hungarian Sleeper.

John Gyumbere, the Hungarian who was in a trance continuously for 169 days in the Lehigh county poorhouse, has for the first time sufficiently rallied to give the story of his life and experiences. He was first found insensible at a neighboring inn, whence he was removed to the county almshouse. This was over six months ago. On the 22d of April he opened his eyes for the first time and kept them open for four days. He did not speak, but remained in a dazed condition. April 23, he either fell or jumped out of the hospital window, falling a distance of twenty-five feet, but was not seriously

injured. April 26, he again closed his eyes, and did not open them until May 20, when he spoke two words after a flower had been held to his nose. Six hours afterwards he closed his eyes and kept them shut until a few evenings ago, when, upon being hailed by a Polander, in Slavonic, he opened his eyes, raised himself up, and in the same tongue replied, stating that he arrived in America about two years ago and went to Virginia, where he was employed by a man named Porter, near Charlottesville. He complains that a negro woman there put red pepper in his coffee, and many rough jokes were played on him, wherefore he fled from that part of the country and went to Baltimore, and then wandered into Pennsylvania. He remembers nothing from the time he fell asleep, until about four weeks ago, when he began to realize that he existed. It was as if he had been sleeping very long. When he awoke partially, he thought he was in a jail. He now feels very weak, but wants to go to work again as soon as he is strong enough.

During his trance he has been examined by a large number of physicians. This is a remarkable case, and, as far as we know, without precedent.

Legal Liabilities of Hospitals.

The New York *Medical Journal* states that the Rhode Island Hospital was sued by a paying patient, to recover damages for a dangerous hemorrhage, which he attributed to unskillful treatment by a surgical *interne*, who assumed to treat a wound beyond his skill, instead of sending for the attending surgeon, as he should have done. The results were gangrene and amputation. The suit gave rise to a statement of the legal rules governing the responsibility of an incorporated hospital for its medical attendants. These two are declared: 1. A hospital is not exempt from liability for unskillfulness or neglect, but is responsible for the exercise of reasonable care by the governing authorities in selecting physicians, surgeons, and *internes*, and, if incompetent persons are appointed, is responsible for the results of their neglect or want of skill. 2. If the rules of the hospital require that in specified cases an *interne* shall summon an attending surgeon, and the *interne* fails to do so, the corporation may be liable for the consequences of his neglect.

How to Get Material for Dissection.

In one of our Southern Medical Schools there was, some years ago, during one of the lecture terms, quite a scarcity in material for dissection. Paupers who died in the city Hospital were usually turned over to the demonstrator of anatomy, but for several weeks no deaths occurred. One of the students at last suggested that, in order to remedy this evil, the Demonstrator of Anatomy be appointed physician to the hospital.

The Relation of Salary to Skill.

The city of New York pays a pilot at the Quarantine station $90 per month, an assistant physician $50, and a fireman $40. The *Medical Record*, commenting on this, says that, judging the capabilities of those employes by their salaries, a man sick on shipboard does about as well to get a prescription from the Quarantine fireman as from a Quarantine physician, and he is in rare luck if he can be attended by the pilot.

The real cause of this difference in salaries is not far to seek. It takes a man with clear head and sound judgment about seven years of constant training to become a pilot, while a dunce may become a doctor by attending two courses of lectures of four months each (missing three-fourths of these), a period far too short to even become a passable fireman.

Bullfrog Ointment.

We had supposed, says the *Pacific Medical and Surgical Journal*, that the ancient and venerable "Bufo," which performed such good service in the therapeutics of olden time, was quietly laid away in the tomb. But it seems not. A practitioner in Alameda county, on his visit to a patient, found at the bedside a jar of something he was informed was "Bullfrog Ointment." Enquiring how it was made, he was informed that he must take a pint of milk and boil it, and then throw into it the living bullfrog and boil it to a paste, throwing out the bones. Thus prepared, it is "the best thing in the world for sore breasts," for which purpose the patient was using it.

The President's Condition

Has continued to give grave anxiety to his attendants. A certain amount of pyæmia, even though slight, developing in a patient already greatly reduced, is always a most serious complication. To this was added unusual irritability of the stomach, partly attributable, no doubt, as Dr. Baxter observed, to a tendency to chronic dyspepsia, which had for years been present in President Garfield. The suppuration of the parotid is another unpleasant complication, and indicates a low condition of the system. Although at the time of writing this the reports are more favorable, it will be some time yet before he can be considered free from considerable danger.

OBITUARY NOTICES.

Harry F. Sterling, M.D., formerly of this city, and a member of the Class of "77" at the Jefferson Medical College Hospital, died suddenly, of typhoid fever, at Pittsburg, August 10th.

He was a young man of rare genius, and embodied in his character all the qualities requisite for making his mark in the profession which he chose to live and die for. His success was assured, and while hard at work, weighted with extra professional cares, he sank, prostrated by the hot weather, and died, after an illness of but ten days. He had been resident physician to the Howard Hospital, of this city, and assistant to several of the Departments of the Jefferson Medical College Hospital. He was the son of the late R. B. Sterling, Esq., of this city, and only last November married Louise B., second daughter of Chas. C. Haffelfinger, Esq., also of this city. Dr. S. was much beloved by his associates, and his untimely death casts a gloom over the summer holiday of many of his friends.

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Communications.

ETIOLOGY OF TYPHOID FEVER.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Indiana.

We do not expect to give more than a cursory view of the Etiology of Typhoid Fever. It is always a subject fraught with great interest to the student who would search out the cause of the disease.

At the very threshold we are met with the query: Is typhoid fever a contagious disease? We find a great array of authorities on either side of this question. Perhaps, if the opinion of the mass of medical men could be taken by vote, a large majority would be found to be firm believers in the theory of the contagiousness of this fever. The teachers of the past perhaps more than now, advocated the doctrine of its contagiousness. We do not say, from our limited experience, that it is positively not contagious, but we do believe that it is scarcely ever so, if at all.

It is never produced by anything but the peculiar typhoid poison, the origin and nature of which we have much yet to learn. That it never originates *de novo*, seems to be quite well established in the minds of most of those who have made investigation of this matter. Typhoid fever is a specific disease. It is produced by a specific cause. It can no more have a spontaneous origin than can syphilis, or gonorrhœa, or variola. Yet it is not contagious in the sense that these diseases are. It is not communicable by contact, as are the two former, nor by simply breathing the atmosphere coming from a typhoid patient, as variola would be to an unprotected person. The atmosphere may be loaded with typhoid poison, and be the medium of conveying the same to a person susceptible of receiving the poison in this way; but this state of atmosphere is produced, generally at least, by other means than the exhalations from the body of a typhoid patient.

The origin of typhoid fever is always connected with the decomposition of animal matter. But the generation of the typhoid poison is not autocthonous with decomposing animal flesh or excretions. No amount of decomposing flesh, or of filthy excretions, or fetid sewer gas can produce this poison *de novo*. But if the typhoid poison finds a lodgement in such favorable soil, it germinates and rapidly multiplies. If, under these conditions of environment, the poison thus generated finds lodgement in the body of any person capable of having typhoid fever, that fever will result in that person, and in as many more susceptible persons as are exposed to the poison. In this way a whole family or congregated community may be infected, while others in the vicinity, but not exposed to the local focus of poison will entirely escape.

The disease never appears in any locality, however favorable the unhygienic environment may be, until the typhoid poison is introduced from some other locality where it then is or has recently existed. Persons are often, and for long periods, exposed to noxious vapors from privies, sewers, decaying flesh, or excretions, without the development of typhoid fever. But if to such decomposing masses the specific typhoid poison be added, the fever will as certainly result in the persons exposed to the exhalations, as that they continue exposed to them, if they have not already suffered from the disease at another time.

(Persons rarely suffer but one attack.) Before such addition of the poison, no fever occurs. After such addition of the typhoid poison it is sure to occur.

One of the best and most authoritative instances on record is that given by Flint, in his work on "Practice," where a traveler affected with this fever came into a little community and died there. There was not a case there before his arrival, but in about the usual time for the incubative stage to pass, others in the hotel where the traveler died of typhoid fever were attacked, and then others, until a large number had it, and many died of it. None were attacked but those in that little community who were nurses and attendants, or who communicated with them; therefore, it was argued that it was contagious. Those holding aloof from its subjects did not become afflicted. Surely it was contagious! But investigation proved that the stranger's excretions were thrown into a privy "very near" the common well of this community, and that the water, very probably, was thus contaminated. Dr. Flint, in the work above referred to, strongly argues from this instance the contagiousness of typhoid fever (p. 712, Ed. 1866), but in a recent number of the *Medical Gazette* (June 25th, 1881), in referring to this same incident, he says: "Now, the interesting part of this story is, that the families in which the disease manifested itself were in the habit of drawing their drinking water from a common well at the tavern, and were in constant communication with the inn-keeper's family. It was thought by some that the keeper of the tavern had poisoned the water, and an analysis and thorough examination was made, but nothing of a poisonous nature was found, except the privy, into which the dejections of the sick stranger had been thrown, was located very near the well, which the villagers used in common. Strange to say, I never suspected at that time that the propagation of the disease was effected by means of the water, but thought that the air was the medium of communication." Another point of great interest in this instance, is the fact that a family in the village that did not use that water at the inn were not affected with the disease. They had a well of their own.

Now all this proves, as far as one example can, that animal matter, excretions, etc., do not generate the disease or poison de novo. That well and privy were as close together before the typhoid stranger's excretions were cast into the latter, as they were afterwards, yet no case of fever occurred. But the typhoid poison found a favorable soil in which to multiply, and those who took the water became its ready victims. Here contagiousness was the supposed cause of propagation, whereas it very probably had nothing to do with it.

Another instance where the fever seemed to be contagious: A family in this vicinity was suffering from typhoid fever. Some ten of the family had it before its ravages ceased. Two persons went there temporarily to nurse them. They both contracted the disease. It was, therefore, argued that the disease was very contagious, and no one would go near again to help the family in their distress. It was overlooked that these nurses drank of the water and eat of the food the same as the affected family had done. This was most probably the source of their infection.* Where the poison came from that infected this family I do not know, as I cannot tell who visited them and left their excretions behind them, nor can I tell where the first subject of it had been to get the poison in water or food that was already contaminated. However the poison was brought there, it found a favorable soil for growth and multiplication, and for exerting its power on the dwellers of that house. Many such instances occur, which give the appearance of spontaneous origin; but if typhoid fever is a specific disease it cannot originate without a specific poison; and such specific poison is no more apt to originate de novo than is the poison of syphilis or variola.

Almost every practitioner of experience has met with instances like the above named. On the other hand, very many instances have been met with where one individual in a family has had the fever severely and yet no other one would become a subject of it, although the patient had been carefully nursed by its various members, many of whom had never been subjects of the disease. Now, why are such instances so common if the disease is contagious? In these instances, either the typhoid poison in the excretions does not find a favorable soil in which to multiply, or by careful hygienic efforts its powers are neutralized, and therefore the family escapes.

* These persons that thus contracted the fever and carried it home with them did not communicate it to other members of their respective families. Now if the fever is contagious, as is variola, scarlatina, or rubeola, it is certainly fair to presume that they would have been the cause of the fever in other members of the family who nursed them. Such was not the case. It seems far more reasonable, therefore, to accept the now recognized fact, that the disease is the result of the specific poison germ, and that in these cases, as in many others that fall under our observation, the poison germs did not find a favorable soil in which to multiply and exert their power. Therefore only the one infected person in each family had the fever, and that person became infected in some locality other than that of his own home.

I well remember a family in which nearly every member became the subject of typhoid—some ten in number. The neighbors all around them nursed and watched, but it became at once the idea that the water or some local cause was at work there producing the disease, and the helpers were careful to avoid these sources of infection. Not another case occurred in the neighborhood outside of this family. Where is the contagion here? If infection was here, as it must have been, it was kept within local limits. The favorable soil here was the common filth of the family, in and all around the premises, which was notoriously abundant. We often read or know of some family where typhoid fever is present, and where a relative or friend residing some miles away go in to nurse the sick and become subjects of the disease. At once contagion is charged with the spread of the fever to these subjects. Possibly it may in some sense be so, in some cases, but those who set up the plea of contagiousness seem often to forget that the visiting friends and nurses partake of the same water and food as had the patient who is now sick; or, perhaps may have been careless about promptly removing the excretions and thus have permitted the air to become loaded with typhoid exhalations. Time and again do persons who never had the disease remain day and night with typhoid patients and not contract it. How then is it contagious, in the ordinary sense of that term? *

Again, as to the spontaneous origin of the fever, or of the poison. It will be said, as I have heard it, something like this: "A family residing in a certain place for years, are not in communication with the outside world to any considerable extent; they drink the same water from the same spring, or well, and live as they ever have done. Now, after years of residence in that place a member of the family is attacked with typhoid, without any known exposure, and other members take it also. How do you account for such instances of the fever, if it does not have a spontaneous origin?" In reply, we have to say, we cannot always trace the poison to its origin in these cases; but on the other hand, you cannot tell whether the afflicted member of that family, or several of them, have, or have not taken the poison into the stomach in a drink of water in the nearest town, or in a glass of milk in some friend's house, in some hotel, or in some article of food taken while away from home, or in food at home, which had been bought from some other place. There is very little ground left for supposing its spontaneous origin.

A person in the incubative or prodromic stage of typhoid fever may leave his excretions, with typhoid poison in them, at some country privy, or in some rural soil, favorable for the multiplication of the poison germ, all unconsciously to himself or any one else. He may do this ten or five hundred miles away from his home. Three or four weeks later he is in the midst of a course of severe typhoid fever, and the seed planted in the country privy have brought forth their fruit, in the way of typhoid cases, in the family where this man had, all unconsciously dropped the seed in their vicinity weeks before.

Some years ago, I was called to see a family of five members. I found three of them afflicted with either variola or varioloid. Where have you been to contract this disease? We do not know! Have you not seen or met any one affected with smallpox? Not that we know of! Have you made any purchases lately? Nothing but this calico, for dresses! Not a thing? No, unless you include a few groceries! Have you been away from home on a visit lately? No, not further than the store, perhaps, a mile away! Nor had visitors? None but neighbors!

Now, here is a case in illustration. These people had no idea how they came in contact with the poison. Smallpox was absent from the place at the time, and had been for years. How came they by it? It may have come to them in the calico. But they may have met it in the street. Sure it is that they had been exposed to variolous poison, unless we set up the claim of spontaneous origin. Who will do that? We can just as well claim the spontaneous origin of syphilis. True, a cart-wheel may come in the way sometimes, but there is always a woman between the man and the cart-wheel. No one will claim the spontaneous origin of either of these last named specific diseases. No more can we claim the spontaneous origin of typhoid fever, which in itself is a *specific disease, arising from a specific poison, which never produces any other disease than typhoid fever.*

* Liebermiester says, "Physicians and nurses who take care of such (typhoid) patients, are no more frequently attacked with the disease than are persons who have never seen such cases. Up to the year 1865, I have never seen in the hospitals which I visited (Griefswald, Berlin, Tübingen) a single hospital patient, physician or nurse attacked with typhoid fever, although such cases are placed in the general wards. Other observers have had the same experience. According to Murchison, during a period of fourteen years in the London Fever Hospital, 2506 patients with typhoid fever were treated, and during that time only eight cases originated in the hospital. (*Encyc. Med.* Vol. ii, p. 46.)

After the above date many cases arising in hospital gave the appearance of contagiousness of this fever, but their origin was clearly traced to infectious sources within the hospital structure and surroundings that entirely shut out all evidence of contagiousness. (*Loc. cit.* p. 47.)

In the number of the *Medical Gazette*, before named, Flint says: "According to this theory, then, typhoid fever is a communicable, miasmatic, contagious disease, but not contagious in the usual sense of that word. This view is reasonable, philosophical, and probable, but not certain.

"Now, the question naturally suggests itself, whenever this disease occurs, must it have been derived from some person already infected, imbued with the active principle or contagium vivum? Our answer must be yes. Facts seem to point to the conclusion that these germs exist in the dejections."

He also refers to the case where typhoid fever was conveyed to a patient by transfusion of blood from the veins of a doctor to those of a patient, and subsequently typhoid fever was simultaneously developed in both.

Now, this is a plain, strong case, showing that the typhoid poison may, during the incubative stage of the fever, possess power enough to produce the disease in another person if introduced into his system by the medium of the blood. If the blood may thus contain the poison in a state capable of propagation and multiplication when transferred to a favorable soil during the incubative stage, may not the excretions also contain the poison possessed of a like power to propagate and multiply when transferred to privy, or sewer, or animal filth, and so produce the disease? If so, the person who is in the incubative stage of typhoid may readily infect a community, and be hundreds of miles away before the prodromic stage comes upon him, thus leaving persons behind him infected without giving to them the slightest idea of where the poison came from to infect them.

There are many points in the etiology of this disease of which we cannot now speak, as space will not permit, such as age, season, water-level, milk, food, etc. Some very extensive epidemics have had their origin in the milk supplied by dairymen, who had typhoid fever in their homes, or who were careless as to the water used in washing their vessels.

Only a few years ago, in Dublin, a quite extensive epidemic of typhoid fever, for its origin, was clearly traceable to a single dairyman. The disease followed in his tracks everywhere he went, and did not extend beyond the families to whom he supplied milk. The whole trouble was clearly traceable to the infected water he added to his milk, or with which he not too carefully washed his cans and buckets.

Again, the long continued vitality of the poison germ is worthy of note. This, too, may readily account for the seemingly spontaneous origin of typhoid cases. An instance is related by Gietl (*Cyclo. Med. Ziemssen*, p. 56), in the following words: "A villager who had contracted typhoid fever at Ulm returned to her native village, a place where typhoid fever had not existed for many years. The excrements of this person were thrown on the dunghill. Several weeks later five persons were employed to remove this dunghill. Of these five four were attacked with typhoid fever, and one with gastric symptoms and swelling of the spleen. The excrements of these five persons were buried deep in the dunghill. Nine months later two persons were employed in completely removing this dunghill; one of them was attacked with typhoid fever and died of it.

In these and many other instances, the air is the medium of conveying the poison to the system through the lungs. This being the case it is impossible to always know when and where any one is exposed to the infectious principle. Food and drink are, perhaps, the more common vehicles of the contagion. Such facts as the few herein given render it difficult to establish the purely contagious character of the disease, and seem clearly to indicate that it is infectious rather than contagious in the ordinary sense of the latter word.

POISONOUS SYMPTOMS DEVELOPED IN ONE CASE FROM THE USE OF OIL OF TURPENTINE, IN ANOTHER AFTER THE APPLICATION OF A PLASTER OF THAPSIA.

Reported to the Medical Society, Dis't. of Columbia,

BY H. C. YARROW, M.D.,
Of Washington, D. C.

I beg leave to call the attention of the Society to the histories of these cases, for the reason that, although similar accidents may have been noticed by members of our profession, I have been able to find little or nothing about the toxic effects of the drugs mentioned in current medical literature.

CASE 1.—L. M., a young man of about twenty-two years of age, visited my office a short time since and related the following facts: A few days previous, feeling unwell, with a pain in his back, and having taken cold, he called at a drug store and asked for ten cents' worth of castor oil and turpentine, of this he was advised to take a teaspoonful, but as he was suffering a good deal he took a tablespoonful, or perhaps more. He retired at 9 P.M., slept well and rose at 8 A.M.,

with a strong desire to urinate. This desire increased until it became constant, and he made unavailing efforts until 10 A.M., at which time, with great pain, he passed his water, and thereafter dribbled a little every five minutes. At the hour mentioned, 10 A.M., with the first urination came blood and corruption (so the patient described it). I saw him at 5 P.M. of the same day, and his condition was as follows: Body bent forward, face congested, eyes injected, respiration quick, pulse about 100, temperature not taken. He complained of intense pain in his back, some nausea and headache, and a constant desire to micturate. His bowels had been opened freely during the day, and he still had a desire to go to stool. He exhaled most strongly the odor of turpentine. He was directed to go home, make use of mucilaginous drinks freely, and take twenty-five drops of deodorized tincture of opium every two hours, until sleep ensued. In case the troublesome symptoms continued he was to report the next day. He returned the next day at 5 P.M., and reported himself as very little better, although he had passed a good night, only one dose of the opium having been required. He brought with him a vial of urine which was exceedingly turbid, becoming deep red after the sediment fell to the bottom. This was examined and found to contain a large quantity of urates, pus, and oxalic acid, and had a strong violet odor; no casts were found.

In the interval between the visits of this patient I had carefully gone over my text-books, in the hope of discovering some plan of treatment indicated for such toxic symptoms as the patient exhibited. No positive advice was given; in fact, the matter was hardly alluded to in any of the works at my disposal. One author states that poisoning by turpentine must be treated on general principles. Knowing, however, that turpentine is considered an antidote to phosphorus, I thought perhaps the exhibition of the latter article might prove of benefit, on the principle that it is a bad rule that will not work both ways. The patient was accordingly directed to take one-sixtieth of a grain of phosphorus three times daily, to continue the mucilaginous drinks, and if he could not sleep, another twenty-five-drop dose of the opium previously prescribed. Under this treatment, continued for a few days, he made a good recovery, although the pain in his back lasted for some time, and for nearly a week a very perceptible terebinthinate odor clung to him. It becomes of interest for us, therefore, to determine, if possible, whether the patient was threatened with an attack of kidney congestion or acute nephritic inflammation, evidenced by pain in the back, for which he took the castor oil and turpentine, by which the coming trouble was precipitated or did the remedies simply produce congestion and strangury and the other symptoms enumerated. My own impression is that the trouble was caused entirely by the turpentine, as the backache could be accounted for, the patient having been engaged in moving furniture and books a few days previous to his sickness. I have also endeavored to discover just how much of the turpentine was taken, but cannot answer positively. The man probably received equal parts of castor oil and turpentine, and if he took one tablespoonful or half a fluid ounce, he must have swallowed not less than two drachms of turpentine. He is not positive, however, as to the exact quantity of the mixture taken. In looking up the subject of certain toxic symptoms produced by turpentine I have jotted down the following notes:—

In *Am. Jour. Med. Sci.*, vol. xxxv, 1858, is a reprint from Dublin *Hospital Gazette*, by Dr. John Maund. This author states, that from an examination of works on medical jurisprudence, he is forced to conclude that fatal poisoning by turpentine is very rare. Pereira and Christison mention that fl. ʒij of oil of turpentine killed a dog in three minutes. Dr. Maund, to see if the poisonous action of turpentine was uniform, made a series of experiments on dogs. Half an ounce was administered, which produced symptoms of intoxication, etc., but all effect was lost after twenty minutes. Another two ounces was given, but although grave symptoms were seen the animal gradually recovered. The quantity of turpentine was increased up to four ounces, but all the animals recovered. So it would appear that the conclusion of Schubarth, that the effect is not uniform, is correct. Dr. Maund relates a case of suicidal poisoning in a female thirty years of age, who it was supposed had taken between four and six ounces. The appearance of the body suggested that the patient perished from strychnine poisoning, and that death had suddenly occurred from tonic spasm. No strychnine was found, on examination of the viscera. The internal organs presented the appearance of a person dying from asphyxia, membranes of the brain and spinal cord being greatly distended, liver and kidney congested, bladder empty but firmly contracted, and healthy. The impression in view of the symptoms is that death resulted from asphyxia produced probably by tetanic contraction of the muscles of respiration.

From this statement it may be seen that we have no positive data upon which to base a conclusion as to the poisonous dose of oil of turpentine, and it is rather singular that the dose my patient took should have produced such severe constitutional effects.

Case 2.—The second case is one in which a plaster of thapsia, 6 × 6, was ordered a young female for a pain in the chest, by a brother practitioner. The application was made at bedtime, 10 P.M., and the region selected was in the subclavicular space of the right side. The plaster was allowed to remain until 10 A M. of the next day, when I was sent for and found the patient's condition as follows: Quick pulse, with considerable fever, intense itching beneath the plaster and extending to the roots of the hair, eyes congested, with lids œdematous, cheeks very much swollen, red and painful. The skin under the plaster showed quite large, distinct vesicles, but on the neck, face and brow there were none, the skin having the reddened, brawny appearance seen in a case of erysipelas; in fact, I at first believed I had such a case to deal with; there was, however, no line of demarcation, the redness ending in a slight blush. As the patient was anæmic, and to be on the safe side, I put her on large doses of the tinct. of muriate of iron and ordered as a local application the liq. plumbi sub. acet., diluted with laudanum, which was afterwards replaced by cosmoline. The itching was so painful at night that ammon. bromide and chloral were needed to procure sleep. In three days she was quite well, but slight photophobia remained for some time. I have looked for records of similar cases in my own books, but have found none, although I am credibly informed that cases similar to mine have occurred in this city.

I must confess, perhaps to my shame, that I have frequently employed thapsia plaster without knowing exactly what it was; and to assist the knowledge of some of my brethren who may perhaps have prescribed it in the same way, I subjoin what I have been able to discover about it. Thapsia, or the deadly carrot, received its name from the Island of Thapsus; it is a violent purgative, is found in northern Africa and southern Europe, and is a perennial herb, and belongs to the umbelliferæ. According to the French codex, it is the resin from the root of thapsia garginica which is used. To prepare the plaster, the following ingredients are melted and incorporated together: yellow wax, resin, white pitch, turpentine, melige turpentine, glycerine, white honey, and resin of thapsia. This mixture is then spread upon the French sparadrap, a sort of plaster cloth.

Thapsia, when fresh, contains a white, acrid juice, and Stillé and Maisch state that the acridity is due to the resin. On page 1388 of the last edition of their Dispensatory they state that Galen, Dioscorides, and the Arabians were familiar with its use, and also make the following remarks: "applied as a plaster, the skin becomes inflamed with intolerable itching, and a copious vesicular eruption occurs. If the application is not prolonged the eruption speedily dries up, but in the contrary case the vesicles become confluent, break and expose an ulcerated and suppurating surface, which on healing leaves scars resembling those of smallpox. On delicate skins its operation is extremely severe. It is stated that the workmen employed in preparing extract of thapsia on a large scale were afflicted with fever and swelling of the hands and face, and from time to time were obliged to suspend their work. A case is also related in which the application of a plaster of thapsia resin to the chest was followed in about twelve hours by severe strangury and violent itching about the genitals and anus. Stillé and Maisch also state that in its therapeutic operation it does not differ from other counter-irritants, such as croton oil, euphorbium, mezereon, and tartar emetic.

If this be the case, in view of the danger which may result from the use of thapsia, would it not be better for us, in the future, to substitute some one of the reliable remedies.

MEDICAL PRACTICE FIFTY YEARS AGO.

BY A. ROTHROCK, M.D.,
Of McVeytown, Pa.

Extract from an Address delivered before the Juniata Valley Medical Association.

* * * Having been actively engaged in the practice of our profession full fifty-one years, it affords me pleasure to refer to the many important improvements for the relief of suffering humanity during my professional life. Among other operations in surgery we would mention ovariotomy; the bloodless operation, as it is termed, in amputations; the improved system of treatment in diseases of the eye, the ear, and the throat, which have each a distinctive chair for the education of the student in all our first-class medical schools; the hypodermic treatment of many diseases; the use of Sayre's plaster jacket in spinal affections. But in my estimation the greatest boon of all to the sufferer is that of anæsthesia, which has over-ridden and outlived all opposition from the timid, the ignorant and

the superstitious, and which is now recognized and endorsed by every respectable physician and every sensible man. Half a century ago, the agonizing cry and the terrible demonstration of pain manifested by the patient under a severe operation was appalling to witness.

Contrast, if you will, an important case under the knife of the surgeon without anæsthesia, with the placid sleep and tranquil countenance under the most painful extremity now, and we can readily appreciate the great, the inestimable relief produced by chloroform and its kindred articles of the materia medica.

Now let me ask what is the mission of the medical men of the present day? It is emphatically to elevate our standard, literally, scientifically, and professionally.

A little more than half a century ago cinchona bark was the infallible remedy in treating bilious intermittent, remittent and other forms of fevers. The saddle-bags, pockets, and every available corner of the country physician's armor were crowded to overflowing with cinchona bark, and patients were crammed with that detestable dose of huge dimensions, until the very appearance of bark was repulsive to any stomach of ordinary sensibility. In 1826, when I entered the office of my preceptor, the sulphate of quinine was introduced, and such was the strength of this alkaloid when first discovered that two to three grains were sufficient to break a paroxysm of intermittent fever, and this improvement was the *subject of all subjects* discussed by medical men. I think the price ranged from $20 to $25 per ounce. Soon afterwards, however, by advance in chemistry, a much larger portion of the article was extracted from the same quantity of cinchona. Quinine became cheaper, of less strength, and of course must be administered in larger doses.

The introduction of veratrum viridi, bromide of potassium, hydrate of chloral and some other articles of the materia medica of comparatively recent date, also adds materially to our list of valuable medicines.

I may here state that the bilious intermittent fever of 1830 was in many respects characterized by the same symptoms in the invasion that we witness in the present typho-malarial fever. One point of difference, however, that the fever of 1830 was essentially inflammatory in its character, in proof of which I will say that venesection was one of the leading remedies to be resorted to. In a paroxysm of bilious intermittent fever every symptom denoted a highly inflammatory diathesis. If we neglected to bleed at the first, or at most second, visit to our patient, we reasonably anticipated a very protracted course of typhoid fever in the end; whereas if timely bleeding was practiced and active antiphlogistic treatment pursued, in two or three days we expected a crisis that required the administration of sulphate of quinine, which at once broke up the chain of febrile symptoms and the patient convalesced.

As time advanced in subsequent years, the inflammatory symptoms became less distinct, and in 1847 the bilious inflammatory fever of former times merged into a severe epidemic of typhoid fever, which required a course of treatment essentially the opposite of what prevailed years previous. This typhoid was of a low and malignant grade, was very contagious, and in my locality during one winter season some sixty cases would each and every one be traced to one origin. Active stimulants with nourishing and supporting regimen were from the beginning demanded, and generally succeeded in restoring the patient after a course of confinement varying from three to six weeks. Whereas, if venesection was practiced or any depleting remedies employed the patient invariably died.

There is an erroneous impression among all leading physicians of the present day that the ancient practice of bleeding in fevers as well as in all inflammatory diseases was manifestly wrong, and that much evil resulted from this depleting course of treatment; and at the present time this sentiment pervades all classes of society. If I propose now to bleed in a case of pneumonia, pleurisy or other inflammatory disease, which in my judgment requires venesection, the patient looks aghast, the lookers on are amazed that the idea of bleeding should for a moment be entertained. Remonstrance is at once made, and we expect to hear the exclamation, "I am too weak to be bled!" When, however, I decide that bleeding is clearly indicated, I persevere until I accomplish my purpose, and when judiciously practiced, always with benefit to my patient.

Now, while I fully endorse the stimulating and supporting plan in typhoid fever and all low forms of disease, I boldly declare that the present practice of repudiating in wholesale terms the judicious use of the lancet in every form and type of disease is essentially wrong, whether it emanates from the learned professors in our first-class medical colleges or the humble peasant who only in part reflects the prevailing idea as he catches it from higher authority; and I here predict that the day is not far distant when a wholesome revolution will dawn upon us

as to the use of this remedy, *potent* for good when properly used. I contend that the use of the lancet as practiced half a century ago was judicious, scientific and fruitful of good results in diseases that prevailed at that time. We should then not lose sight of type as it occurs in the various forms of disease. An attack may assume a bilious inflammatory character one year and the next may be a type of typho-malarial fever or of mixed symptoms; and the intelligent skillful physician who studies well the different types of disease as they occur in different seasons and under dissimilar circumstances in the course of a life-long practice, is the man who will be most successful in a career of usefulness and most prompt in affording relief to suffering humanity. So far as my observation goes the *invasion* of bilious intermittent fever of 1830 was in no respect materially different from the *first* stages of our typho malarial fever of the present day, except that the former was more violent, exhibiting more clearly the synochous grade of Dr. Cullen. In the further treatment, however, when the first or second paroxysm was broken, we expected a crisis and a good recovery, in the fever of half a century ago, whereas in the fever of the present day, when the first violent symptoms are arrested, instead of a genuine crisis occurring and speedy convalescence following, as in the fever of olden time, we may reasonably anticipate a regular set in of typho-malarial, of weeks' duration.

Now let me ask what is the mission of the medical men of the present age? It is clearly to elevate our standard of culture, science and medicine. The place to begin is unquestionably at home. Every physician should scan well the character, aptitude and intelligence of all applicants as students to enter his office, and admit none whose education does not fully come up to the requirements of the State Medical Society, as adopted in the annual meeting of 1878. Our fathers, to whom reference has already been made, as members of the first medical society in this district, were all men of good English and classical education. They were all gentlemen, recognized by the legal and clerical profession as fully their peers, and were regarded as the elite of society. The increased facilities for education we now enjoy, the wealth of our country, and the higher instruction of all classes of society, male and female, demand that the physician of the present age shall be a man of intelligence as well as an expert in his profession. The fact is, no man can be a gentleman and be ignorant. The physician is necessarily thrown into the most intimate relations of society. He is made the confidant of the delicate, sensitive female, as well as the stalwart, thorough going man. If, then, he is not an intelligent, refined gentleman, no matter what his attainments are, professional or otherwise, he cannot be an acceptable physician.

Half a century ago, the medical department of the University of Pennsylvania, then decidedly the leading school in the United States, had a Faculty consisting of six professors and one demonstrator of anatomy. The Jefferson Medical College, the rising and vigorous rival of the University, had the same number of professors. By the late announcement of the University, we learn that this venerable Institution fills the winter course with twelve regular professorships, the spring course with sixteen, and that there are twenty-four demonstrators of anatomy, pharmacy, etc., beside the auxiliary faculty of five professors. The Jefferson and other leading medical schools have advanced the course of instruction, perhaps, in the same proportion.

In view of the fact that we represent an already over-stocked profession, and one which, by the way, is yearly becoming more crowded, it may be in the interest, both of the public and of ourselves, if we insist on the higher standard of culture for admission to the medical ranks.

It is well, also, to bring to mind the almost forgotten fact, that a century ago the examination preliminary to medical study in the University of Pennsylvania was more rigid than any school in the land dares to insist upon now. We were fresh in our separation from the medical centres of the mother country then, and dared to endeavor to produce as fair a medical progeny as they did; but rival schools led to a lowered standard, so low, indeed, that within the memory of most of us, a man for whom the school was most certain to blush in future, was shoved out of the lecture room and into the world to take charge of human life and happiness. This was all in the recent past. The spirit of progress, the rivalry of better things, prevents, to a great degree, any such reckless graduation of poorly prepared doctors now.

Let us hope, however, we have not yet reached the crest of this advancing and rising wave; that in future, even a critical public may be satisfied with what the doctors are doing in ameliorating the suffering of our race, and increasing its average term of vigorous vitality.

—There are five hundred and seventy-six medical students in the Berlin University this summer.

Hospital Reports.

HOSPITAL COLLEGE OF MEDICINE, LOUISVILLE.

CLINIC OF DUDLEY S. REYNOLDS, M.D.,

Professor of Opthalmology and Otology.

Syphilitic Laryngitis.

Gentlemen:—The patient before you, Clay Taylor, is 33 years of age, married, resides in Lexington, Kentucky, is a switchman on the railroad, and as you observe, cannot speak above a whisper. You see, gentlemen, those of you who are acting as assistants to the clinic to-day, that the whole of the right vocal cord in this man's throat has been transformed, apparently, into a gummy, vascular mass, and that the anterior half of the left cord is also in nearly the same condition. Now, it is useless to ask this man a question as to his previous history, so far as the diagnosis is concerned; but in order to satisfy you that I have omitted nothing that is proper to be considered in the investigation of his case, I will interrogate him with the view of obtaining what is called the history of the case, but what is, in fact, in the vast majority of instances, utterly worthless. This man has constitutional syphilis, and it matters not what he may say concerning his past history, nothing but constitutional syphilis can produce the pathological condition now present.

"Have you ever had any venereal disease; did you ever have a sore on your penis?" "Yes, sir, seven years ago I had a chancre, which lasted about three weeks. It was very painful. Dr. ——, in Nashville, treated me during that time, and when the sore began to get well I left Nashville and went to my present place of residence, Lexington, Ky. Since then I have always had good health, and I don't think I have anything the matter with me except this throat, which has been sore for about two weeks. I attribute it to cold I caught during exposure to the bad weather; the place of a switchman at a railroad station is not very easy."

You see the man appears to be well nourished; he has had no treatment except that received during the three weeks he remained in Nashville while he had the chancre. He declares he has never had any other symptoms of syphilis. He says he has never had any skin disease; has not until now had sore throat; there are no scars upon the margin of his tongue, in his fauces, nor has there been destruction of the turbinated bones. Therefore the only manifestations from the time the chancre healed, seven years ago, until two weeks ago is this attack, in the throat, which I have denominated a gummy deposit upon the surface of the vocal cord of the right side and of the anterior half of the left cord. You observe that the man whispers; he tells you it is with pain he is able to do even that much. His appetite is good; he sleeps well at night, except that when he goes to sleep he suddenly awakes in a great state of excitement and alarm, imagining that his "breath is stopped;" he tells me his bowels move every day; he seems, as you may observe, well nourished. He, therefore, requires that kind of specific constitutional medication which will tend to alter the state of nutrition in the vocal cords. He requires that kind of treatment which will unload the present engorged state of his lymphatic system, for I find the cervical ganglia are enlarged, those in the submaxillary region being the size of small marbles.

Now such medicines as tend to dissolve fibrinous concretions in the lymphatic channels and in the tissues are those which are indicated in the treatment of such conditions as this man presents. Though he has syphilitic disease of the vocal cords, and though this is undoubtedly constitutional, we shall give him no mercury. I have long since ceased to believe in the reputed specific powers of mercury in the treatment of syphilis in any stage. Bernstead says, no mercury should be given during the presence of the chancre; that the patient's condition should be carefully watched; and he details a number of cases to show the natural course of the disease, even under mercurial treatment. He then proceeds to endow mercury with specific antidotal properties. Professor John Ordronoux, of New York, in the *British and Foreign Medico Chirurgical Review*, for 1870, I believe in the January number, published an account of a very large number of cases of syphilis which had been treated by mercury, and in which serious lesions of the tegumentary and osseous systems occurred, and a much larger number of cases wherein no constitutional treatment whatever had been practiced, and where the disease had gone through certain evolutions without committing any serious ravages upon the bony, tegumentary, or the nervous structures, the manifestations coming on occasionally, but comparatively mild in character.

Prof. John Hughes Bennett, of Edinburgh, taught, with a great deal of earnestness, the doctrine that mercury was not only a specific antidote to the syphilitic poison, but that it laid the foundation for those remote manifestations in the osseous structures which have added greatly to the horrors of syphilitic disease. I feel satisfied that mercury should not be administered as a supposed antidote to the syphilitic poison in any stage of the disease whatever. I believe that Dr. Keyes, of New York, in his admirable treatise on "Venereal Diseases," published this year, in Wood's Library of Standard Medical Authors, has touched very nearly the point of the proper therapeusis for syphilis, when he says, "no specific constitutional course of treatment should be instituted until the constitutional manifestations of the syphilitic poison become manifest. If a man has a chancre he should receive no constitutional treatment unless there is visible constitutional derangement. If the chancre gets well, leaving the man in his ordinary state of general health, nothing whatever should be done. If, however, after the lapse of some months he comes with an eruption upon the skin, and shows other signs of syphilitic disease, the specific tonic treatment by mercury should be begun."

Now, what Dr. Keyes means by the specific tonic treatment by mercury it is difficult to conjecture, for if mercury is a specific against the syphilitic poison I cannot understand why he would delay its administration beyond the

period of the initial lesion. That it is antidotal to the poison after it has reached the first stage of evolution, wherein it is able to present visible manifestations of its constitutional character, Dr. Keyes fails to prove.

I warn you, gentlemen, pay attention to this point in the treatment of syphilis; when your patient has a chancre undertake no treatment with the view of dissipating or eradicating from the system the syphilitic virus. Practice those methods of cleanliness and soothing applications that are known to hasten the process of recovery from the local disease; see that the secretory and excretory functions of the body are properly performed, and give your patient to understand that he may or may not have subsequent manifestations of the syphilitic disease. In case he should have, it is then quite time to begin the treatment for the relief of those manifestations.

Clay Taylor comes here with gummata of the vocal cords. Clay Taylor is in a good state of general health. The iodide of potassium is recognized as one of the specific agents in the treatment of advanced stages of syphilis. The iodide of potassium is supposed to act in a double sense, the potash dissolving the fibrinous concretions, and iodine stimulating the secretory functions of the glandular organs. Therefore, this man shall have ten grains of the iodide in a tumblerful of water before each meal and at bedtime, every day for four days. If in that time he has not quite recovered, and no toxic effects of the medicine are present the dose shall be increased to fifteen grains; after a lapse of four more days the dose shall be increased to twenty grains, and so on, every four days adding five grains to the dose until the disease disappears or the toxic effects of the drug are produced

It is quite time to begin medicating a man for syphilis when it shows some manifestation of its presence in the system, and perfect nonsense to be dosing him with supposed antidotes to the syphilitic poison when there are no manifestations of the syphilitic disease present in the system.

Many persons have been known to have chancres well characterized without subsequent constitutional phenomena. Many persons have been subjected to the so-called specific antidotal powers of mercury during the presence of a chancre, and for a period of two or three years afterward, and have then had the most fearful ravages of syphilitic osteitis. I know an instance of a steam boat pilot, who was the subject of this peculiar specific treatment by mercury for three years. The humerus of the right arm became necrosed; his general health failed, he went to bed, was confined for months, and had to submit to an amputation. A suit was instituted against two prominent practitioners for malpractice, and while no experts were summoned to testify on either side, the gentlemen were glad enough to pay five hundred dollars and have the plaintiff's petition dismissed. I merely allude to this to show you the dangers attendant upon the so-called specific antidotal treatment of syphilis by mercury.

If mercury fails when administered according to the rules laid down, then mercury is not a specific. If it fails in the vast majority of cases then it should not be considered an antidote in any sense. If people have chancres followed by what is called secondary eruption, which runs a definite course and disappears in a certain time, whether the patient take mercury or not, then it is apparent that powerful drug should not be administered in the early stages of syphilis. If, however, plastic infiltration of any of the tissues take place, whether from syphilis or other causes, mercurial drugs are indicated, because of the defibrinizing powers they possess, and not because of any antidotal power to the syphilitic poison. Virchow's doctrine of hyperinosis is the key to the solution of the proper treatment of all that class of pathological conditions characterized by concretions of fibrinous material in any of the tissues. The carbonate of ammonia, were it not for its debilitating effects, would become at once the most valuable agent in the treatment of conditions like those from which Clay Taylor suffers.

Dr. Durkee, in his excellent work on venereal diseases, has called attention to the importance of alternating carbonate of ammonia with the iodide of potassium. This practice, it may fairly be said, is in full accordance with the most rational system of therapeusis. The value of quinine as an eliminating agent, which has the power to augment greatly the functions of the kidneys and the skin, should always be kept in mind; and in districts where malarial diseases are common, it will be found that whatever tends to debilitate the system will almost certainly lead to other malarial manifestations than those included in the list of fevers. It will be found also that quinine or some of the salts of the Peruvian bark become necessary adjuvants to the successful treatment of any sort of constitutional debility. It frequently happens that persons come to this clinic with the complaint that the eyelids can no longer be opened without the aid of the fingers. To prop them up, as it were, the mental faculties are disturbed, the patient is unable to walk in a straight line, but turns all the while to one side. Ophthalmoscopic examination often in such cases reveals an œdematous condition of the disc, with well-marked yellowish plastic deposit in its margins. Iodide of potassium in full doses has been found to afford complete relief if administered in the earlier stages of these manifestations. A notable case of this kind occurred recently, in a person who was not instructed as to the nature of his ailment, and who was ignorant of its cause. Relying upon the syphilitic character of the local manifestations in his eyes, iodide of potassium in full doses was given, gradually increased until all the symptoms disappeared, without any toxic effects of the drug becoming manifest. The gentleman inquiring as to the nature of his ailment, after recovery had been fully established, was told it was syphilitic. He stoutly denied any knowledge of syphilitic infection, and returned to his home rather indignant that he should be suspected of ever having suffered an attack of syphilis. Ten days afterward he wrote that when at college, forty-three years before, he had a troublesome form of skin disease, which baffled

the skill of the doctors, and which lasted for a long time; he afterwards had a sore tongue, from which he recovered, and for full thirty-nine years had enjoyed what appeared to be perfect health. Being further interrogated, he remembered that a few months before he went under the doctor's treatment at college he had a small sore in the meatus urinarius, which lasted a number of weeks and which was quite painful during micturition. It is fair to assume that this man had a chancre, that it was followed by the so called secondary eruption, that he afterwards had mucous patches on the tongue, and that this disease not being suspected he received no specific treatment, and that it finally disappeared in the ordinary course of its evolutions, and that it remained latent for thirty-nine years, again to show itself in the nervous structures, for this man had not only the disease manifested in the margins of the optic disc but he had evident syphilitic disease of the brain, as his intellectual faculties were greatly obtunded, and he no longer had the power of coördination which would enable him to collect his thoughts to pursue a continuous course of conversation, nor to walk in a straight line.

I hope, gentlemen, the case before you, with the remarks I have made, may lead you to adopt the course of treating syphilis when it is clearly manifest in some of the organs or tissues of the body, and of treating it according to its manifestations, and that you may be led to avoid those terrible mistakes which grow out of the erroneous idea that mercury or any other drug at present known possesses specific antidotal powers to the syphilitic poison.

Editorial Department.

Periscope.

Relation of Ulcerated Os to Pregnancy.

Dr. J. H. Bennett, narrates this case in the *British Medical Journal* (Med Surg Reporter)

I was applied to in February, by a Polish lady, "to bring on abortion." She was thirty-six years of age, the mother of several children, and had nearly lost her life a year before, at Warsaw, from uncontrollable sickness and constant and profuse hemorrhage, during pregnancy. She had the best consulting advice to be obtained at Warsaw; and, after every ordinary means had been tried in vain, abortion was induced, at the end of the sixth month, to save her life, as she was rapidly sinking. She came south, partly to recruit. When she sent for me, she considered herself about three months gone, and had had bleeding for a month. Latterly, the loss had been hemorrhagic, and she was becoming anæmic. There was constant sickness, and she was blanched and weak. All these facts were placed before me by her relatives, and my assistance demanded on the lines laid down by her previous Warsaw physicians. I refused to accede to the request until I had ascertained that such a course was imperatively necessary, demanding an examination. This was allowed; and I found a hypertrophied cervix, with fungoid bleeding ulceration. These lesions were treated as described. In a fortnight, the bleeding ceased entirely; in less than a month the sickness had ceased; and in two she was quite well and in fair general health—five months gone in a then all but normal pregnancy; the fœtus vigorous. She left me to go home, in this, state, in April, and has since been happily confined of a live, healthy child. Her obstetric physicians at home were much surprised at the treatment of her case, and at the results.

The existence of inflammatory lesion of the cervix or uterus, at the time of parturition, does not give the accoucheur any particular clue for any special treatment; but it prepares him for accidents. He should know that he has a bad case in hand; that rigidity of the os; slow, painful labor; laceration of the cervix; hemorrhage, during or after parturition; adherent placenta; metritis; ovaritis; hemorrhagic; purulent; long-continued lochial discharges; in a word, a bad labor and a bad getting up may be expected, in the natural course of things.

Such women often do well, however, for two or three weeks after their confinement, and then flag, and become weak, feverish, and ill. Six weeks or two months after their confinement, their uterine condition should be carefully investigated; and, if any disease exist, it should be treated and cured before they are restored to their ordinary duties, as I stated at the commencement of this essay. By always following this course, when actively engaged in midwifery practice, I shielded my patients from the illnesses which often follow confinements. In ordinary practice, I believe the accoucheur takes leave finally of his patients three weeks after the confinement, and hears no more about them.

On the Pathology of Acute Periostitis.

Mr. C. T. Dent read a paper on this subject before the Surgical Society of London. He said that the exact relation which acute periostitis and osteo-myelitis bear to each other, as well as to the articular affections with which they are so often associated, have long been matters of dispute; so, also, have their effects with regard to the extent of necrosis which usually follows. French and German writers hold, generally, that total necrosis of the shaft will not take place unless osteo myelitis has been present, as well as periostitis. This view is not shared for the most part by writers in this country, and cases are on record where the removal of the entire diaphysis has been performed for the results of acute periostitis alone. The exact tissue where the changes commence in acute periostitis is also a subject of difference of opinion: some, German writers especially, hold that it commences in the outer cellular layer of the periosteum, and destroys the

fibrous layer by suppuration. This is, however, but one form of the disease frequently seen about the lower third of the femur, and also in true whitlow (panaritium periostale). More commonly it begins in the deeper osteogenetic layer and raises up the periosteum from the bone. This may lead to osteo myelitis, and is sometimes, though not commonly, associated with affections of the neighboring joints. Acute idiopathic osteomyelitis, as a primary affection, is rare in this country. In examining microscopically the periosteum in a case of acute periostitis unaccompanied by osteo myelitis, the author found that the inflammatory changes were chiefly situated in the deeper parts; the fibrous layer was intact, though infiltrated, and new bone was developing in it. There was no active inflammation of bone or medulla; the changes observed in the latter, the author considered to be due to disintegration and breaking down of the tissues, owing to the cutting off of the vascular supply. The leg in this case had been amputated on the nineteenth day. Other specimens showed that the inflammation spreads from the outer to the deeper parts, chiefly around the smaller vessels. The author remarks that usually, no doubt, where these cases are met with, it is not uncommon to find periostitis, ostitis, and osteo-myelitis all existing together, yet it is none the less important to distinguish them from each other, as far as possible, and also from the form of disease attacking the outer cellular layer of the periosteum, for when modified by early treatment, the ultimate results are very different.

Treatment of Simple Fractures and Dislocations of the Bones of the Leg and Foot by the Immediate Application of Plaster-of-Paris Splints.

Mr. John Croft lately read a paper before the Surgical Society of London, on the treatment of simple fractures and dislocations of the bones of the leg and foot by the immediate application of plaster-of-Paris splints (lateral). The author said that opportunity is taken by this paper and demonstration, first, to reaffirm that it is not only safe, but beneficial, to apply plaster of-Paris splints (lateral) immediately for simple fractures of the bones of the leg and foot; second, to demonstrate the particular method of applying these splints, and how quickly and easily they may be put on; and thirdly, to elicit observations on the practice at the various hospitals with regard to the immediate treatment of fracture of the leg and foot. The author's experience, of five years' duration, is decidedly in favor of covering the injured or swollen part immediately. Only the most severe cases of contusion and subcutaneous laceration are excepted. The special advantages claimed for these splints, as made and used for the author at St. Thomas' Hospital are—uniform pressure; complete fixation of the broken bones and injured muscles; perfect adaptation to the limb and maintenance of extension; diminution of risks of pressure, sores, pains, or excoriations; diminution of risks of delayed union; facilities for quick removal and re-application; comfort to the patient; freedom of movement allowed to the patient; simplicity and cheapness; economy of time and trouble. The author desires to popularize the use of these splints because he has found them, during five years' constant experience, of great benefit to patients, attendants, and surgeons. From statistics supplied by Mr. Battle, the present Registrar at St. Thomas' Hospital, it appears that during the years 1875 to 1880, inclusive, a total of 717 fractures of the leg were treated at the hospitals, and of this total 498 cases were treated by the immediate application of plaster-of-Paris apparatus, and 98 cases by splints first and plaster-of-Paris later, 118 by splints only, and 12 by other methods. During 1875, out of 97 cases of fracture, 19 were treated by plaster-of-Paris apparatus. In 1880, out of 131 cases, 123 were treated by the immediate application of the plaster splints. In the intervening period the numbers had rapidly increased from 19 to 51, to 84, 96, 125, and 123. *Pari passu*, the treatment by splints only had declined in favor; in 1875, 63 were treated by splints, but in 1879 and 1880 only 2 and 7 respectively. This may be regarded as strong testimony in favor of plaster-of-Paris apparatus. All the cases may not have been treated by Mr. Croft's particular method. In his own wards his particular plan has been persistently pursued. No disasters or evil consequences have been reported, though during the six years he has been assisted by as many as twenty-six house surgeons and forty dressers. He thinks the average stay of patients in the hospital has been shortened by this plan, but he could state positively that the cure has been materially hastened by it.

The Treatment of Ranula.

An important discussion recently took place before the Société de Chirurgie on the treatment of ranula, in which nearly all the members took part. M. Deleus recited a case in which the cyst was excised and cauterized, but at the end of two months it returned. This fact, he believed, resulted from the migration of the sublingual ranula through the muscular fibres of the floor of the mouth and developing a cyst in the buccal cavity. M. Trelat for many years excised with the scissors in the case of small ranulæ, and where they were more voluminous he treated them by puncture and the injection of iodine. M. Després treated every kind of ranula by the drainage, and always with success. M. Verneuil observed that he tried many methods in the treatment of ranula, but with varied success. He adopted the plan of slow section, for which purpose he passed a curved needle charged with a double thread of silver wire through the cyst, and united both ends in a firm knot. In five or six days the section was effected. M. Labbé did not doubt the success obtained by M. Després by his method, but he considered that to keep a seton in the mouth for six months to cure a ranula constituted a veritable infirmity. M. Després, in replying, said that he never knew a patient to complain of it. M. le Dentu said that M. Augur employs the injection of two drops of chloride of zinc in the deliquescent state into the cyst without previously evacuating it. This treatment always succeeds; there follows a sharp inflammatory reaction, but it is by no means dangerous. The inflammation subsides in five or six days, and at the end of

ten days the cure is complete. For small ranulæ one drop of the liquid suffices, and if the cyst is very voluminous it is preferable to draw off a little of the contents before introducing the chloride of zinc. M. Gilette could not agree with M. le Dentu in considering that chloride of zinc was not attended with danger and that it was always successful. He had seen M. Augur, at the Hôpital Beaujon, inject three drops, and the pain was so intense that the patient tried to jump out of the window; and after all the cyst returned and was eventually excised.

Spasm of the Œsophagus.

The following case of œsophageal spasm is narrated in the *Lancet*, by Dr. Moorhead:—

On April 26th, at 9.30 P. M.. I was summoned to attend a gentleman, over sixty years of age, who had been suddenly seized with obstruction of the œsophagus, which completely barred the passage of any food, solid or liquid, into the stomach. On my arrival, I was informed by my patient, who seemed in excellent health, that about 8 P. M., at the close of dinner, he inadvertently swallowed a piece of meat imperfectly masticated, which did not enter the stomach, but lodged in the œsophagus near its cardiac extremity. This was recognized by the sense of oppression which immediately ensued in the lower dorsal region. A glass of sherry was at once swallowed, in the hope of facilitating the removal of the obstruction, but it was of no avail. Then some water was taken which was not only ineffectual, but immediately developed hiccough, terminating in speedy rejection of all the liquid imbibed.

With regard to treatment, I first used the probang, pushing it down to its utmost extent, but without any benefit. I then employed a bougie of the largest size, which I believe effected an entrance into the stomach after encountering some resistance near its cardiac orifice. When the instrument was withdrawn, however, and liquid swallowed, there was no passage, as the fluid was brought up in a few moments. The conclusion arrived at, therefore, was, that though the foreign body was removed, the œsophagus was completely closed by spasm; or, in other words, that the case was then one of spasmodic stricture of that tube. Perfect quietude was enjoined, while a small draught containing thirty minims of laudanum was prescribed.

April 27th. At my visit at 7 A. M., I found that the opiate had been rejected, and that there was total obstruction. After another unsuccessful trial of the probang and bougie, I administered a quarter of a grain of morphia hypodermically, applied a warm bran poultice to the lower dorsal region, and advised small pieces of ice to be swallowed frequently.

It was then decided to discontinue further surgical interference, and to pursue only medical treatment. With this in view the liquid extract of belladonna was brushed freely over the spine, in the dorsal region, while ten minims of the tincture of the same drug was administered in teaspoonful doses every four hours. This treatment was continued until about eight o'clock in the evening, when, on swallowing several small pieces of ice in rapid succession, it was found they were no longer rejected, and that some ice cream freely entered the stomach. Shortly afterward the patient was able to regale himself with half a pint of soup. From this time the dysphagia entirely ceased, leaving only a little mucous irritation of the canal, which, however, rapidly subsided

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The Sorghum Vulgare, or Broom-Corn Seed, in Cystitis.

Dr. Y. P. Garnett, of Washington, D. C., says, in a communication to the *American Journal of the Medical Sciences* for July, 1881:—

As far back as 1860 I was induced to try the broom-corn seed in cases of cystitis, both chronic and acute, at the suggestion of those who had seen it used with great reputed benefit among the plantation negroes of Maryland and Virginia. The mode of administration practiced by them was in the form of a decoction of the seed, made by boiling two ounces of the seed in a quart of water down to a pint, and requiring the patient to take the whole of this pint during the twenty-four hours. It was alleged that a perfect cure could be effected in the space of ten days usually, by the use of this remedy alone. My experience, however, failed to sustain these extraordinary claims for its specific virtues, but satisfied me that it possessed undoubted merits in both the acute and chronic forms of simple cystitis. This opinion I verified by the results of numerous cases treated with the broom corn at that time. Owing, in part, to the exciting events and disorganizing influences at work in Washington immediately preceding the war, I failed to preserve any record of these cases. Within the past year I have had repeated opportunities of testing the value of this remedy in cystitis.

In conclusion, the doctor gives the history of four of his most recent cases in which marked improvement followed its use.

Structural Changes in Exhausted Muscles.

The histological changes produced in muscles by over exertion have been recently studied by Dr. Otto Roth at Heidelburg. The method employed, as given in the *Lancet*, was repeated electrical stimulation, in most cases a weight being attached to the muscles, and the stimulation continued until the muscles ceased to respond. The chief alteration found was the granular degeneration in small areas, described long ago by Du Bois Reymond as occurring under similar conditions, and also the peculiar vitreous or waxy change in limited spots, which has before been described by Kronecker, and which was found by Rokitansky and Zenker in the muscles of patients suffering from typhoid fever, by Hayem in smallpox, and by Friederich, Charcot, and others in progressive muscular atrophy. Gussenbauer and Waldeyer, however, have ascertained that this change may be produced by simple injury to the muscular fibres. It is highly probable, therefore, that its occurrence in exhausted muscles is simply the result of the muscular fibres being torn by the tension to which they are subjected exceeding their elasticity. This affords support to the view of Neumann, that the rupture of the fibres in typhoid is the

cause, and not the effect, of this peculiar degeneration; the rupture being really due to muscular effort and the friable state of the muscles. A curious fact incidentally ascertained in these researches was the extreme reflex excitability developed in the rabbit by exhaustion of a few muscles. After a single limb had been experimented upon, the general reflex irritability became so intense that a touch on the back of the neck caused violent opisthotonos.

The Formation of Trichinæ Cysts.

The mode of formation of the cyst of trichinæ has been studied by M. Chatin, and described in a communication to the Académie des Sciences. It was formerly said to be formed partly from the contractile tissue, and partly by a secretion from the nematoid, but this opinion was based only on some apparent differences in the thickness or aspect of the cyst wall, and not on any careful study of its formation, which necessitates the examination of animals dying or killed in different stages of the affection. When it arrives in the muscles the worm forms adhesions with the interfascicular tissue, in which rapid changes occur. The elements increase in size, and during the growth of the protoplasm it assumes the appearance of an amorphous mass, in which, however, nuclei and vacuoles can be seen, which seem to indicate that the mass consists really of aggregated cells. By the growth of this the primitive fibres are compressed. In the new protoplasm fine proteoid granulations are first observed, and then other granulations which present all the reactions of glycogen. Then follow important changes in the periphery of the granular mass, containing the trichinæ, now curled up in the interior; the outer surface becomes distinctly thickened and indurated, and may then become lamellated or present granulations or folds. The sarcolemma takes no part in the formation of the cysts except occasionally furnishing it with a purely adventitious layer. Moreover, when the nematoid contracts its first adhesions to the sarcolemma, and not to the interfascicular tissue, it rapidly dies without determining a new formation.

Why Does Bovine Virus Fail?

The causes of failure in using bovine virus are thus set forth by Dr. Bessey, in the *British Medical Journal*:—

A primary vaccination can alone be accepted as a fair test of the activity of any virus. Secondary vaccinations cannot be considered; they may or may not prove successful. A successful vaccination can only be defined to be the reproduction of one or more characteristic cow-pox vesicles on the subject; and if the virus be very active, numerous vesicles may appear over the body at points distant from the point of infection, all of which will be characteristic, and run the regular course. This extra eruption is a common sequence of vaccination with good active heifer-lymph. All beginners find the same difficulty in the use of animal-lymph, unless care be taken by the propagator to produce lymph easily absorbed, and in this way to provide against failure. Failure with animal lymph may be accounted for in three ways. 1. It may be the fault of the operator, and not of the lymph, failure being due to want of skill or to carelessness in its use. 2. It may have been imperfectly preserved; it is rigid in its demand for care in this matter, and must be preserved in a cool, dark, dry place; it cannot be kept too cool. 3. The method adopted in collecting it may be imperfect. It should be taken from well formed characteristic vesicles only; but a difference requires to be made between the collection of lymph to be used on the human subject and of that intended for animal propagation. For the latter use, it must be allowed to mature fully, in order to prevent degeneration; but for the former use, owing to the quantity and greater viscidity of the bovine albumen over the human, it is necessary—to secure absorption of the virus by the human vessels, which have not the capacity of the animal—that the lymph be extracted from the bovine vesicle at an early stage, or while the lymph is thin and watery, or before it has become too viscid. The results on the human subject are equally satisfactory, and I do not have one failure in a hundred since adopting this precaution.

Rupture of the Bladder from Muscular Exertion.

Two cases illustrating this rare accident are quoted in the London *Medical Times and Gazette*, from a St. Petersburg Journal:—

The subject of the *first* case was a man, thirty-two years old, who, while removing a heavy sack of flour from a railway platform to a cart, was seized with a violent pain in the hypogastrium. Trying some time after to make water, he only passed a few drops of blood. He came to the hospital on foot two days afterwards. His pulse was then 88, and his temperature 37.7° C. There was great tenderness in the hypogastrium, and a catheter only withdrew a few drops of blood. His general condition, and the apparent absence of any cause for it, prevented the diagnosis of a ruptured bladder, which the local symptoms would have justified. He soon, however, became much worse, and died on the sixth day after the accident, without having passed a drop of urine. The autopsy exhibited recent general peritonitis, and a rupture, two centimeters and one third in length, at the upper part of the posterior wall of the bladder, a little to the right of its apex. The *second* case occurred in the person of a man, forty years of age, who, two days prior to admission, had been seized with a violent pain in the hypogastrium, while endeavoring to raise a very heavy burden. He died on the sixth day after the accident. Peritonitis with purulent exudation was found, together with a rupture, three centimeters in length, at the right side of the posterior wall of the bladder, about two centimeters from the apex. The mucous membrane of the bladder was quite normal in appearance, and no trace of coagulum was found within the organ or in its vicinity. Of the urine, which, during life, had in both cases collected in the right hypogastrium, there was but little found after death, it having evidently become diffused by the intestinal movements. The local tenderness in that region became less concentrated in that spot.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. William C. Wile sends us, in a reprint from the *American Journal of Obstetrics and Diseases of Women and Children*, for July, 1881, a valuable contribution to the history of hydrocele in the female.

——Post-partum Atrophy of the Uterus, is the subject of a paper by Walter Coles, M.D., which was read before the St. Louis Obstetrical and Gynecological Society, May 19th, 1881, and now comes to us in the form of a reprint from the St. Louis *Courier of Medicine*, for August.

——The question whether all anæsthetics which contain chlorine, bromine or iodine are dangerous, is learnedly discussed in a paper by Dr. Edward T. Reichert, of Newark, New Jersey, which comes to us in a pamphlet extracted from the *American Journal of the Medical Sciences*, for July, 1881, and in which the author comes to the conclusion that the dangerous properties, if not the degrees of potency, of anæsthetics, are decidedly enhanced by the addition of either of the halogens, and it is not at all improbable that these ethers are mostly loosely molecular compounds, some of which are more readily decomposed in the system than others, and that their degree of dangerousness, *cæteris paribus*, depends upon the relative amount, and relative physiological power of either of these halogen principles which enter into the composition of any one of them, and upon the degree of fixity of the molecules.

BOOK NOTICES.

Landmarks, Medical and Surgical. By Luther Holden, Ex-President, Member of Council, and Member of the Court of Examiners of the Royal College of Surgeons of England; Consulting Surgeon to Saint Bartholomew's and the Foundling Hospitals; assisted by James Shuter, M.A. Camb., F.R.C.S., Assistant Surgeon to the Royal Free Hospital, etc. etc. Third Edition. Philadelphia: Presley Blakiston, 1881. Cloth, 8vo. pp. 73. Price $1.25.

To the student, or young surgeon, this is practically a most useful little book. Its title explains fully what the work is, and what it is intended to accomplish, viz., to point out such surface marks, lines, eminences, depressions, etc., as will serve as guides to, or indications of, deeper-seated parts. Diagrams have not been introduced, as the author is fully convinced that they would frustrate his original object, which he informs us is "to teach students the habit of making the eye and the hand work together, and to educate the touch upon the normal living body." We heartily recommend this work to all students and young practitioners, for whom it has been written, and who by its aid will readily be able to make thorough and intelligent examinations, or in surgical operations to cut down upon any part with confidence.

The First Annual Report of the State Board of Health of New York. Transmitted to the Governor, December 1, 1880. Albany: Weed, Parsons, and Company, Printers, 1881. pp. 203.

This volume contains, in addition to the regular report of the Board, which comprises the history of its organization, its by-laws and standing committees, reports of meetings and discussions on health laws, registration and the Bureau of Vital Statistics, the local sanitary government, preventable and prevalent diseases, purity of water supplies, etc. etc., together with special reports of the various committees, and an able discourse by the Hon. Erastus Brooks, on "What the State owes to the People," also full reports of the principal prevalent diseases; diphtheria, dysentery, malarial diseases, and smallpox. The report shows evidence that valuable work has been done by the Board during the first year of its existence.

Transactions of the American Dermatological Association, with the President's Address at the Fourth Annual Meeting, Newport, R. I., August 31 and September 1 and 2, 1880. Official Report of the Proceedings, by the Secretary, Dr. Arthur Van Harlingen. Philadelphia: 1881. pp. 84.

Besides the president's address, to which we have previously alluded elsewhere, a number of valuable papers, evincing great activity among the members of this Society, were presented and read. Among these, we notice, "Medicinal Eruptions," by Dr. Arthur Van Harlingen; "Ainhum" by Dr. Da Silva Lima, of Brazil; "Tumors of the Skin," by Dr. Charles Heitzman; "Papilloma Cutis," by Dr. W. A. Hardaway; "Herpes Progenitalis," by Dr. B. F. Greenough, and several others, among which the Report of the Committee on Statistics, by Dr. James C. White, who furnishes a valuable Report on Leprosy in the United States. We expect great and good results from the unparalleled energy with which this Association is pursuing its investigations.

THE

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PRACTICAL ETHICS IN THE PROFESSION.

The practice of medicine has always been classed among the *professions*, that is, it is a business that required a learned education in order to undertake it. It is also generally claimed that a profession is something higher than a *business*, and considerably above a *trade*. But to make such a claim good, the profession ought in itself to be in a general way improving to those who pursue it, as well as to those for whom it is carried on. It is a grave question whether this can be asserted, without qualification, of the practice of medicine. To be sure, we often hear of how "ennobling" is the relief of suffering, of how grandly humanitarian is the labor of the physician. But perhaps these expressions are but part of a system of pleasant flattery from outsiders and of self-deception from within.

Victor Hugo, in one his novels, makes a worldly diplomat say to a clerical dignitary that when a bishop and a senator meet they can well afford to wink at each other and to speak the truth. Each, he intimates, is so conversant with shams that it is needless to maintain them as against one other.

So, perhaps, between a medical journalist and his readers, the wink may, for once, be passed, and a little truth telling about the profession be indulged in. We shall, however, merely repeat two conversations we recently took part in, and rather leave to others the reflections to be made upon them.

One was with a prominent manufacturer of surgical instruments. At one time he had been in another manufacturing business, and his general mercantile knowledge of men is extensive.

"Doctor," he said, "what an enormous number of unreliable men there are in your profession! What little respect they have for honest dealing! I have dealt with many classes of men, but with none so unreliable as physicians. They respect their promises less, and they keep their engagements more negligently. I have known them to deny their own signatures on orders, and when they had to acknowledge it, they resorted to artifices to avoid paying their debts and fulfilling their just contracts. I have six thousand dollars worth of orders on my books long past due; in many instances I have been requested to send goods C. O. D., and when they arrived the consignees refused to receive them, and I have paid expenses both ways. I now rarely give credit, as long experience has taught me that in a large proportion of cases I should get nothing."

To this effect spoke the merchant, evidently feeling unpleasantly after his commercial experience with the profession. We, of course, could not dispute his facts; but we pointed out that very many men in the profession were no better than strangers and aliens in it; fellows who had crept in at the window and not come in at the door; irregulars, quacks, humbugs, and ignoramuses, whom no one wanted to drive out of it more earnestly than the real graduates, the genuine doctors of the "regular and scientific" school.

Some days after we repeated this conversation to a physician of a neighboring State, who for

nigh a score of years has had a living practice in a country town. He is one of those men who call things by their names, and uses words not to darken knowledge but to let his hearers know his opinions. What was our surprise when he exclaimed:—

"Your instrument maker was entirely right, and I should like to ask how it can be otherwise? The whole practice of medicine is based, to a certain extent, on deception, and these base arts poison a doctor's mind and destroy his sense of honesty.

"You are called to a patient: in nine cases out of ten you have to deceive him or the family, or both. You represent that the disease is more serious than it is, in order to get more credit for its cure; or you pretend there is no danger, lest you create alarm, when you yourself are quite uneasy about it.

"Again, you are constantly asked by your patients and their friends numbers of questions which you cannot correctly reply to, because you do not and cannot know the answers. But you must not confess ignorance, nor even doubt, or else you are reported as a dull fellow at the corner grocery and the sewing circle. No, you answer positively and promptly, though you are lying, and you know it.

"Your competitors pretend to knowledge which they do not have; you must do the same, or else you lose business, through unfavorable comparisons.

"You are called in to help some friendly doctor out of a scrape. You do it through a series of deliberate deceptions practiced upon the patient and the family.

"A mother insists you must prescribe for her children when it is clear they need no medicine. You write, for a placebo, mint water, colored and sweetened, and you give minute directions about administering it. You do your duty by your patient, but you have acted a lie, and your moral nature suffers for it.

"You cannot be expected, when you are in active practice, to know every new-fangled instrument and remedy that comes out; but to hold your own you are often obliged to pretend to do so, or else run the risk of being crowded out by some new-fledged graduate.

"The charge was, that Doctors do not pay their debts. What wonder, when they themselves are cheated out of half or a third of their earnings? People will not pay them; the doctor's bill is left to the last; it is paid grudgingly, and often most ungratefully. How can a man help becoming callous to his obligations to others when he is thus treated, year after year? Probably there is no business in which the meanness of mankind is brought home more directly to the mind than in this of ours. Who can expect us to rub against this filth for years and not be defiled?

"If physicians, in short, become habitual liars, I don't see how they can be expected to be anything else."

With this bitter reflection on the present method of medical practice, he closed.

It did not seem worth while to object that his experience had been as unusual as it was unfortunate; nor to quote some of the common places about the nobleness of a class devoted to the relief of suffering; nor to indulge in the cheap exhortation to be in the world, but not to touch the sin of the world.

All these suggestions we knew were not novel to our friend, nor would they have been useful to him. We prefer to leave the matter for our readers to think over, just as he put it.

SENTIMENTALITY ABOUT VIVISECTION.

That pleasant French traveler, HENRI HAVARD, tells us that on his first visit to Holland he used to see quite often the heavy barges called *trekschniten* dragged along the canal by a big dog and a woman, harnessed to the same rope, while the man steered. On a later voyage he missed the big dogs and saw only the woman, or perhaps two women, tugging at the heavy boat. Informing himself as to why this change in the habits of so conservative a race as the Dutch, he learned that the local Society for the Prevention of Cruelty to Animals had secured the passage of an act prohibiting the harnessing of dogs; so the women had to do it all themselves!

In similar style, the anti vivisectionists of England and this country are striving to prevent some very few of the lower animals from being used for the purposes of science, when the inevitable consequence of their success would be that the progress of medical knowledge—which means the relief of pain, the restoration to health, and the preservation of life—would thereby be retarded.

An organized effort has been made in England to have an act passed, absolutely prohibiting the use of animals for physiological demonstrations and investigations. How little occasion there is for any such measure is shown by the returns made to Parliament of the number of experiments performed on living animals during the year 1880, by medical men and others licensed under the Act. The experiments were in most cases performed at laboratories connected with the universities in England and Scotland, or at hospitals or veterinary institutions. The experiments numbered 311, of which only 114 can have been the cause of any pain, and of these all but seventeen were of a kind involving no more pain than is experienced by ordinary vaccination. The painful part of the proceeding in the seventeen cases involving pain was made under anæsthesia, and no appreciable suffering can be said to have been inflicted beyond confinement until the wounds healed, or until the animals were killed. The most important results have been acquired in the elucidation of at least one obscure and fatal disease (anthrax), which attacks sheep and cattle, and also persons engaged in wool-sorting.

It has been easy to obtain, there as here, the sympathy and countenance of various distinguished persons who know nothing of the purposes for which vivisections are essential, and whose feelings are readily worked upon by harrowing descriptions of sufferings, for which the professional philanthropist does not scruple to draw altogether upon his imagination.

There is also a party in this country who are anxious to carry the protection of the lower animals to the same extreme. They would apparently sacrifice the upper to the inferior species, in their zeal for a favorite hobby. Such persons can find ample scope for their energies in ameliorating the condition of brutes without encroaching on that part where they subserve a most useful purpose for the human species.

Notes and Comments.

Therapeutic Notes.

NAPHTOL IN SCABIES.

Prof. Kaposi uses:—

℞.	Naphtoli,	15 parts
	Axungiæ,	100 "
	Saponis virid.,	50 "
	Cretæ præcip.,	10 " M.

It is said to cure rapidly, both the scabies and the consecutive eczema.

CHRONIC ULCERS.

Dr. L. A. Davidson, of West Va., writes us that he cured an ulcer of 32 years' standing, by the application of the following:—

℞.	Acidi tannici,	℥j
	Glycerinæ,	℥iij
	Extract. pin. canad.,	℥iv. M.

To be applied on absorbent cotton.

OTORRHŒA.

For otorrhœa where there are no osseous lesions, Dr. Brisson (*Paris Médical*) recommends

℞.	Chloral hydratis,	gr. xlv
	Aluminis sulph.,	gr. lxxv
	Aquæ destil.,	℥ iij. M.

A few drops, warm, in the ear, five times a day.

This local treatment should be supported by such general measures as are indicated.

RELIEF OF CANCER PAINS.

Dr. Auger (*Union Médical*) uses:—

℞.	Atropiæ sulphatis,	gr. j
	Aquæ destillat,	℥ ij. M.

He states that this solution, applied by means of a compress wetted with the solution and covered with oiled silk or gutta-percha, gives considerable relief to the pain of cancer, without causing symptoms of absorption, such as dilatation of the pupil or dryness of the throat.

ULCERATION OF THE OS.

In hyperplastic swelling of the vaginal portion, and in follicular ulcers of the os, Dr. Kisch, of Berlin, has derived great use from it (*Berliner Klinische Wochenschrift*, *No.* 42, 1879). He employs—

℞.	Iodoformi,	℥j
	Glycerinæ,	℥x
	Olei menthæ piper.,	gtt. vi–x. M.

Shake well together. Steep a plug of cotton wool in this and apply to the vaginal portion.

The Medical Therapeutics of Gynæcology.

Dr. J. H. Buckler made a trenchant statement, last year, in the Boston *Medical and Surgical Journal*, which should be impressed on practitioners. He said: "Nothing has been done in the past thirty years to teach the value of internal remedies in affections of the womb. Plenty of steel is used, but in a very compact form and having a very keen edge. Dr. Tilt has published a volume on Uterine Therapeutics, but it is disappointing to find that, beyond giving a list of remedies and speaking in general terms only of their therapeutic qualities, little is said about surgery and topical applications. There are many good gynæcological surgeons, but no therapeutist capable of diagnosticating and treating uterine affections without a resort to the knife has yet appeared. A surgeon in Paris probed the wound of a man who had shot himself through the brain with a large pistol ball. The charge for the operation was, say, six thousand francs. The executors protesting, he said, "Had I written a prescription for the late Mr. C., my charge would have been ten francs; but when we take up an instrument and use it, the patient or his estate is expected to pay liberally."

These criticisms are well deserved, and it is appropriate to mention in this connection that a second edition, thoroughly revised and much enlarged, of the *Modern Medical Therapeutics of Gynæcology and Obstetrics*, edited by Dr. Atkinson, is now in press and will be issued in the early autumn. It is a work which precisely fills the gap to which Dr. Buckler alludes.

Transfusion in Profuse Menorrhagia.

Mr. T. Whiteside Hime has performed this operation with success in a sterile married woman, aged 35 (*British Medical Journal*). Menorrhagia had existed for five years, commencing from fatigue and severe shock during a catamenial period. The anæmia was very marked; the cervix uteri was conical, the os narrow; it was incised and the uterine cavity painted with a strong solution of perchloride of iron, but with little good effect. Mr. Hime drew six ounces of blood from the patient's husband, and, using a special transfuser, introduced the blood through the patient's medio-cephalic vein. During the process her breathing stopped; a drachm of ether was immediately injected subcutaneously, and artificial respiration employed; she rallied, and the transfusion was completed. This was done in November, 1878; since then menstruation has never been excessive. The transfusion was indirect, the blood being first whipped and defibrinated in a warm vessel, then strained into the apparatus, which is double-chambered, so that the blood may be surrounded by hot water. The blood runs, by gravitation, out of the apparatus, through an elastic tube, into the vein. The apparatus is very cheap and cannot easily get out of order.

Elimination of the Pancreas.

Trafoyer published a case where the pancreas was eliminated by stool, the individual recovering. Chiari, in the *Wien. Med. Woch.*, 1880, publishes two new cases.

An individual, 38 years of age, suffered from violent pain in the epigastrium, with vomiting; after a few days' remission, he presented all the symptoms of intestinal occlusion, no purgative having any effect. Finally, after a period of alternating diarrhœa and dysentery, the patient found one day in the discharge a cylindrical mass about thirteen centimeters long, which M. Chiari recognized as a part of the pancreas, still having its excreting duct. This mass must have passed by perforation, from without inward, either into the intestinal canal or the stomach.

At the autopsy of a woman who had presented signs of generalized peritonitis, the pancreas was found in the midst of a purulent mass; the middle portion of the duodenum was perforated from without inward, as also the transverse colon. There had been abundant hemorrhage from the ulcerated pancreatic duodenal artery. No cause could be assigned for these accidents.

Koumiss from Mare's Milk.

The ordinary koumiss, it is well known, is made from cow's milk. This, said Dr. Carrick, during a recent discussion in Edinburgh, is not real koumiss, but fermented cow's milk, which might be valuable in gastric, anæmic, and some wasting diseases, but is of little use in phthisis. Experiments made with it show that it is not so palatable, and apt to cause indigestion if taken in the large quantities that the fermented mare's milk had to be taken in. The best effects of the koumiss cure are got, not only by taking the remedy itself, but by going to the Russian steppes to partake of it there. He was happy to say that he had been making experiments on a small scale, in the way of condensing the koumiss, and they had been very successful. He had some of the condensed article in Edinburgh, which he had made last autumn, and which was still perfectly fresh.

Palliative Treatment of Anal Fistula.

In cases where patients refuse to submit to forced dilatation of the anus, the most rapid and efficacious means of curing anal fistula, M. Mascarel (*France Médicale*), proposes the following course of treatment, which has often proven successful:—

1st. Each day administer an enema of tepid water containing a tablespoonful of glycerine.

2d. After each passage from the bowels introduce into the same a small roll (mêche) of charpie, well spread with the following ointment:—

℞.	Ol. amygdal. dulc.,	℥ j	
	Glycerine,	℥ j	
	Ung. altheæ,	℥ ij.	M.

3d. Before introducing the charpie into the anus anoint the parts just about with a thick layer of the ointment.

4th. If there is constipation, give daily five centigrams of powdered belladonna root. The fistula is generally cured after three or four weeks of this treatment.

Successful Transplantation of Human Bone.

The *Glasgow Medical Journal* informs us that at the meeting of the Pathological and Clinical Society of that city, April 12th, 1881, Dr. William Macewen showed a patient on whom transplantation of human bone had been performed, whereby over two-thirds of the shaft of the right humerus had been restored. The grafts were taken from six wedges of bone removed from limbs of patients affected with antero-tibial curves, and were reduced to very small fragments previously to insertion. The patient was formerly shown to the Society after the first graft had been completed, when there was a restoration of the upper part of the shaft, to the extent of one inch in length. Now, the shaft was completely restored, and the right humerus only measured one half inch shorter than the left.

Delivery in Placenta Prævia.

In a recent discussion at the Obstetrical Society of Edinburgh, Dr. Macdonald said that in dealing with placenta prævia a man must act according to his light and with the materials before him. The more he saw, the more he was satisfied that if the case is seen in time, and the hemorrhage goes on, we ought to go on at once to delivery, because waiting for dilatation or till the full time of labor is a serious risk. Barnes' dilators can be passed through a very small os. He had seen plugging on many occasions, and he did not think we could rely on it to any great extent. There is no treatment for placenta prævia but delivery. Of all the methods of doing this, the use of Barnes' dilators, with delivery as soon as possible, is the best.

Relief of Pains in Locomotor Ataxy.

For the relief of these, Prof. Vulpian recommends that compresses of many folds, after having been immersed in water and wrung out, should be moistened with a teaspoonful of chloroform and then applied to the painful parts and covered with oiled silk. They produce both a revulsive and anæsthetic effect, which relieves the pain. We may employ them also, or have recourse to chloroform ointment, in the case of neuralgia of nerves situated superficially, and in muscular rheumatism. If the cold of evaporation is sought to be obtained for local anæsthesia, ether should be substituted for chloroform.

The President's Condition.

The condition of the President at the time of our last issue was so grave that few entertained any hopes whatever of his living through another week. The great diminution in weight, amounting, it was estimated, to two-fifths of his weight when wounded, was, of itself, an almost certain ground for the most unfavorable prognosis. Nevertheless, there was a reaction from the extreme exhaustion early in the present week; food of a semi-solid character was desired by him, and given in small quantities; there was less delirium, and the rest was better. This improvement continues up to the time we write this, and the attending surgeons express themselves more decidedly in favor of his recovery than at any time for a fortnight. Of course, such an improvement may be temporary only, but it gives a chance, which we are gratified to believe will lead to confirmed hope.

Special Reports.

NO. XVI.—MIDWIFERY.

What may with propriety be called the leading question of the day in this department of medical art is the use of

Antiseptics in Labor.

The literature on the subject is already, especially in Germany, by no means inconsiderable. Antiseptics and disinfectants have long been employed in obstetric practice; but of recent years, since the introduction of antiseptics by Mr. Lister into surgical practice, much greater attention

has been paid to their systematic use in our department. In Copenhagen, Germany, in Switzerland, especially Basel, in Paris, in London, antiseptic precautions have been employed to ward off what is the scourge of our lying-in hospitals.

It is at least twelve years since BISCHOFF, impressed with a visit he paid to Mr. LISTER in Glasgow, returned to Basel, and set himself to carry out antiseptics in the lying-in hospital there, with the most gratifying results.

Since then it has been adopted with enthusiasm by Prof. WINCKEL, in Dresden, Von WEBER, in Prague, KUSTNER, in Jena, HOFFMEIER, of Berlin, etc., and has now or quite recently returned to the British Isles with renewed impetus. To give a complete idea of what it is we must quote in full the rules adopted in the Maternity Hospital, Edinburgh. They are as follows:—

RULES TO BE OBSERVED BY STUDENTS.

1. No student shall be allowed to visit the hospital who is engaged in the dissecting rooms, or in attending post-mortem examinations or infectious cases, either in hospital or dispensary practice.

2. No student shall examine any patient in the hospital, in any way whatever, except in the presence of the ordinary physician or the resident medical officers.

3. Before each per vaginam examination the student shall thoroughly wash his hands in carbolic wash (1 in 30).

4. In all vaginal or uterine examinations 1 in 20 carbolic oil shall be used for lubricating the fingers.

5. Each student, on entering the hospital daily, shall sign the album.

RULES TO BE STRICTLY OBSERVED BY NURSES.

1. *Washing Hands.*—No nurse shall touch, or make any application whatever, to the genital organs of a patient, without having first thoroughly rinsed the hands in carbolic wash (1 in 30).

2. A large bottle, containing a solution of 1 in 30 carbolic acid, and a small bottle of carbolic oil (1 in 20) shall permanently stand on the table in every ward and delivery-room.

3. *Diapers.*—Each diaper, on removal from a patient, shall at once be taken out of the ward or delivery-room, down stairs to the wash house, and then placed in a tub containing carbolic wash.

4. Each diaper shall be washed, boiled, and dried by the laundress.

5. Immediately before application to the patient's genitals, the nurse in charge of the case shall soak the diaper in 1 in 20 carbolic wash, and afterwards dry it, or apply it wet, according to instructions.

6. *Catheters, Vaginal Tubes.*—All catheters and vaginal tubes shall be kept, when not in use, in carbolic oil (1 in 60).

7. *Before* using a catheter, the nurse shall dip her fingers and catheter in carbolic oil (1 in 20).

8. *After* use, she shall wash the catheter in carbolic lotion (1 in 20), and then replace it in carbolic oil (1 in 60).

9. *Syringes, Sponges.*—All syringes and sponges, when not in use, shall be kept in carbolic wash (1 in 30).

10. Before using a syringe, the nurse shall lubricate her fingers and the vaginal tube of the syringe with carbolic oil (1 in 20), and see that air is carefully expelled.

11. *Washing and Syringing.*—All washings and syringings, when such are required, shall be done with a solution of carbolic acid (1 in 60).

12. All the Mackintosh sheets shall be thoroughly washed in carbolic wash.

13. *Dirty Sheets.*—All dirty sheets shall be promptly removed from the ward or delivery-room, to be cleansed.

14. *Deaths.*—On the death of any patient, the body shall at once be removed to the mortuary, outside the hospital.

15. *Visitors.*—No visitor whatever shall be allowed admittance to the hospital, unless provided with a special pass from the resident medical officer on duty.

Of course, it is out of the question to carry out such minute attentions in private practice. The antiseptic precautions here must necessarily be much more lax. Still it is possible to have them; and in the Edinburgh *Medical Journal*, June, 1881, Dr. D. B. HART gives what he thinks is the model, practical, antiseptic method in private practice:—

The obstetrician, in all the ordinary manipulations necessary in a normal confinement, should keep the prevention of the access of air ever before him. Let me briefly sketch, then, what would be my ideal of a labor conducted intelligently and in accordance with natural facts. The parturient woman is in a private room, with pure air and perfect drainage. Abdominal palpation tells the practitioner that the fœtus is lying with its head engaging in the brim. Auscultation shows that the fœtal heart is vigorous and regular. As the pains go on he can feel the uterus diminishing the vertical height of its fundus above the pubes, until it ultimately expels a living child. He feels the uterus remain firm, and then, in about twenty minutes, notes its hardening and diminution in bulk simultaneous with the expulsion of the placenta.

Now this ideal is unattainable in one respect, viz., that vaginal examination is necessary. How is the accoucheur to render his vaginal examination as little dangerous to the patient as possible? In two ways. First, by seeing that his fingers are scrupulously cleaned with turpentine and carbolic acid; and, second, by taking care that his patient, while he examines, is never in the semi-prone nor genu-pectoral postures. These postures admit air when the vaginal orifice is dilated, and are therefore bad for ordinary obstetrical manipulation. This should be conducted when the patient is dorsal or semi-dorsal, with the shoulders raised. The fingers, passed while the patient is in this posture, separate the vaginal walls only where they touch them, and being followed up by them as withdrawn, air is prevented ingress.

Management of the Third Stage.—The mechanism of the expulsion of the placenta, as given by Duncan, clearly proves that traction on the cord to aid the expulsion is inadmissible under any circumstances. It is tempting, and seems natural, to help out a sluggish placenta with a gentle tug, but wrong, nevertheless. The best means of imitating the natural process, when necessary, seems to me as follows: After the child is born, the accoucheur should palpate the uterus, feel that it is contracted, note its bulk, and satisfy himself further that there is no bleeding from the cervix, etc. Nothing active should be done for twenty minutes or so. If the placenta is not then expelled, the following plan should be tried: With the patient on her back, grasp the fundus uteri with both hands, fingers in front and thumbs behind. Squeeze it firmly in the direction of the line joining these, avoiding downward pressure. The uterus will then become smaller as the placenta is squeezed out of it. It is now out of the uterus, as is felt by its lessened bulk. Then press down the uterus in the line of the axis of the brim. This drives the uterus against the pubic segment, and the latter against the placenta, forcing it out. SPIEGELBERG recommends the squeeze and downward push to be simultaneous, but I prefer them separated.

A recent discussion of the subject at the Medico-Chirurgical Society of Glasgow, reported in the Glasgow *Medical Journal*, July, 1881, indicates that the majority of members believed that it was useless to attempt carrying out anything like complete "Listerism" in the management of private cases. One of the members seemed to have made a strong point by showing, as the result of actual observations he had made, that the vagina is normally, in some positions of the body, an open and not a closed tube, and thus admits the air without difficulty, quite to the os uteri. Such being the case, he claimed that the attempt to keep the vagina antiseptic is futile.

The plan carried out by VON WEBER, of Prague, is as follows:—

As soon as a new patient is admitted her vagina is washed out with a two per cent. solution of carbolic acid, and the parts about the vulva thoroughly washed with soap and carbolic acid solution. If the labor be long delayed after the escape of the waters, the vagina is washed out every two hours with carbolic acid solution. In order to prevent the entrance of air into the vagina, a wad of cotton steeped in dilute liq. chlor. (1 to 3) is laid before the vulva. After the expulsion of the placenta the vagina is washed out by the head midwife, with the carbolic acid solution, and if the labor has been a protracted one, the fœtus decomposed, or any operation has been undertaken, the assistant himself must wash out the uterus with a three per cent. carbolic acid solution. All fissures of the genitals are closed with carbolized catgut, and ruptured perinea with carbolized silk. If the vagina has been much bruised a wad of cotton wool saturated with camphor is passed into it immediately after the removal of the placenta. In all natural labors the child is born under the hand-spray, and all operations are performed under the steam-spray. The placenta, till removed from the ward, is placed in a solution of carbolic water. To prevent infection after labor the vagina is washed out every two or three hours with lukewarm two per cent. carbolic acid solution, which has previously been boiled. In all cases where the passage is injured or there are puerperal ulcers, a wad of cotton is laid before the vulva, impregnated with carbolic acid or camphor. The nurses are made to wash their hands in carbolic solution after having in any way come in contact with the genital tract of a lying-in woman.

In STADFELDT'S clinic, in Copenhagen, for five years, all children have been born under the steam-spray, and he expresses his surprise that this method has not been more widely adopted, as it is simple and without injury to either mother or child. The spray is used from the moment any part of the child appears at the vulva till the placenta has been removed, any ruptures that have taken place in the soft part have been sewed up, and a wad of prepared oakum placed before the vulva.

Management of Hospital Labors.

The management of ordinary labors in the Simpson Memorial Hospital, Edinburgh, is suggestive and worth quoting, from the last quarterly report of that institution.

In each ward, during both day and night, an aqueous emulsion of carbolic acid 1–10 was vaporized by means of a spirit lamp. When the ward was more than usually full, two such apparatuses were kept working.

Napkins dipped in carbolic and subsequently dried were employed in every case. It was found especially needful to dry that part of the napkin which rested under the buttocks, as otherwise an abrasion of the skin was apt to occur. All dirty napkins were at once placed in a pan containing carbolic solution 1–20. The vagina of each patient was washed out with slightly warm water containing 1–60 of carbolic acid thrice daily, by means of a douche and a glass tube, each patient having her own special glass tube, which, when not in use, was kept under 5 per cent. solution of carbolic acid. In cases where the lochia were more than usually offensive, the vagina was washed out four to six times daily. The patients seemed to find these vaginal douches very grateful.

It was noticed that after a stay of three weeks or so in a ward the temperature began to rise all over the ward, and in these cases a move was at once made to the other ward, while the ward previously occupied was thoroughly fumigated. Any case showing the slightest doubtful symptoms was at once isolated. As a preventive measure against gonorrhœal ophthalmia, the eyes and face of every new born infant were at once washed with 1–50 carbolic solution, some of it being dropped in between the lids. In all, there were

two cases of ophthalmia, one previous to this treatment and one subsequent to it.

Immediately after delivery the vagina of each patient was well washed out with 1–60 solution.

The favorable results of these measures are clearly seen in the statistics of the Hospital.

Induction of Premature Labor.

The method of induction adopted by Dr. JOHN DOUGAL, Lecturer in the Glasgow School of Medicine, is thus described by him in the Glasgow *Medical Journal*, July, 1881:—

When the patient had completed what we thought about seven and a half months of pregnancy, I began the induction of labor by moving the bowels freely with castor oil. The head was presenting. With patient lying on her left side, a No. 6 elastic catheter, smeared with carbolized oil, and containing its wire, was gently pushed through the os, between the uterine wall and the amniotic sac, toward the patient's umbilicus, until it was obstructed. The wire was then withdrawn and the remaining projecting part of the catheter coiled up in the vagina, and a piece of oiled lint placed in the latter to keep the catheter from shifting. The point of the catheter was directed toward the umbilicus to avoid the seat of the placental souffle, heard externally by the stethoscope. The catheter extended about six inches into the uterus. Patient, of course, kept her bed. In about twelve hours pains began, and the lint and catheter were withdrawn. After this the pains continued sharp, short, and frequent, and in ten hours a small living male was born, without artificial assistance whatever, the labor after the withdrawal of the catheter having been natural in every respect. The child only lived six hours. Patient recovered without a bad symptom.

Accidents of Labor the Result of Uterine Disease.

It is often brought forward that parturition leads to many uterine diseases; but, on the other side, the frequent complications of labor brought about by affections of the os and cervix, have not received adequate attention. A thoughtful article on it has been published by Dr. J. HENRY BENNETT, in the *British Medical Journal* July 9. His argument may be seen from the following extract:—

I believe that I am fully warranted in stating that many of the accidents of parturition are owing to the coexistence of uterine inflammation. The most prominent are, hemorrhage, rigidity of the os, laceration of the cervix, retained placenta, *post partum* hemorrhage. It stands to reason that if the cervix, at the time of confinement, be the seat of a large fungoid, bleeding ulceration, the loss of blood is likely to be much increased; and so it is. I have frequently examined women, confined under my care six weeks after the confinement, because they had lost much more blood than they should have done during the labor, and have found extensive ulcerative disease of the cervix, previously unsuspected by myself or by others. In all cases of rigidity of the os uteri during labor, I have followed the same course. I have examined my patients six weeks after confinement, and have so constantly found chronic inflammatory disease of the cervix, hypertrophy and induration, and often laceration of the cervix, that I am led to the belief that rigidity of the os is nearly always to be thus explained. If I am right in this opinion, there is a deal to modify or erase in most works on midwifery.

My private midwifery practice, during the active period of my career, was all but confined to consultation cases, and to attendance on females whom I had previously attended for uterine disease, generally inflammatory affections. Among these, retention of the placenta, from adhesion to the uterine walls, was so common that I quite expected it. My line of practice was to wait an hour, and then to remove the placenta, which I nearly always found attached to the uterine walls. In those cases, and sometimes in others in which no interference was required, *post-partum* hemorrhage was frequent and troublesome.

Chloral in Labor.

Some observations on this are reported in the St. Louis *Courier of Medicine*, by Dr. B. BRIBACH:—

The mode of exhibiting the drug consisted in giving fifteen grains every half hour until the patient came under its full influence; in unusual rigidity of the os, thirty grains were given as the initial dose. The total amount in each instance varied from thirty to seventy-five grains, forty-five grains being sufficient in the majority of cases. To a few patients thirty grains were given by enema; in the parturient state chloral appears to act even more promptly and satisfactorily when given by the rectum than it does when given by the mouth.

Effect on the Pains.—Chloral modifies the dilating pains of the first stage, in so far that it renders them decidedly less frequent, more effective, and less harassing to the patient. Pains occurring every five minutes will, after the exhibition of the chloral, generally recur less frequently, about every ten minutes. The teasing, wearing sensation in the interval between the pains, with its suffering and the lamentations of the patient, subside, giving way to a state of peaceful somnolence. During the pains the patient is aroused, but the expressions of pain and worry are much less marked. The effect is often so very striking that the parturient process seems to be entirely suspended. Digital examination during the pains, however, shows the uterine contractions to have increased in efficacy, from the more powerful protrusion of the amnion and the rapid progress of the first stage.

Effects on the Os Uteri.—Chloral has the indubitable property of overcoming functional rigidity of the os. In some instances the rapidity of its action is surprising. The presence of fecal matter in the lower bowels seems to counteract the action of chloral.

Further observations on this drug as controlling after pains may be found in the MEDICAL AND SURGICAL REPORTER, p. 68, Vol. XLIV.

(*To be continued.*)

Correspondence.

Vicarious Menstruation, or Gastric Ulcer.

Ed. Med. and Surg. Reporter:—

On the night of November 27th, 1879, Mrs. H., widow, age 28, a former patient of mine, was carried from the cars of the M. J. & N. Railway, upon a rocking chair, and placed. waiting the arrival of her friends, in the ticket office of Arbela station. Complying with her request, I visited her there, and was informed that she had been sent from Memphis, in this (Scolland) county, by Dr. John E. Parish, a distinguished physician of that place, to be placed in my professional care. From the lady I learned that a week previously she had, while in Memphis, suffered under a very severe attack of bleeding from the stomach, which came on suddenly, with great violence, and a large quantity of blood was ejected in a very short space of time. Mrs. H.'s health was good at the time, so good that a condition of plethora existed—but she had not menstruated during several months. She asked me abruptly what I thought was the matter with her. From the imperfect history recited, the signs present, and my knowledge of the previous physical condition of my patient, acquired in several years' professional attendance upon her, during which period I had twice successfully treated her for menorrhagia, I concluded that this was a case of so called vicarious menstruation. Having quite recently read Dr. Walter Coles' valuable essay on the subject, this diagnosis arose in my mind with a promptness chargeable to that writer, whose points were fresh in memory and all appearing in the case before me. Mrs. H. was removed to the residence of her father-in-law, and having pressing engagements elsewhere, I did not see her again until next day, about 7 P.M., when I was hurriedly called by some one who said she had been vomiting blood and seemed to be dying. I found her in bed surrounded by frightened relatives. She was vomiting clots, mixed with warm fluid blood, into a vessel containing nearly a gallon of the fluid, all thrown from her stomach in less than twenty minutes. I applied an ice bag to epigastrium and administered a large dose of Squibb's ergot, followed, after a fresh recurrence of emesis, by another still larger. This promptly checked the hemorrhage for a time, and I at once telegraphed for Dr. Parish, who had safely conducted her through the peril of the first attack. Before that gentleman arrived a severe attack of bleeding came on, and with it some new calamities, shaking the early diagnosis of vicarious menstruation, and forcibly suggesting that this was something more, to wit: localized burning pain in the stomach, aggravated by a small test dose of brandy, constant retching, paroxysmal ejection of blood and terrible pain in the back, that distressing pain which belongs to the clinical history of gastric ulcer. These symptoms prognosticated an early dissolution for the sufferer.

Dr. Parish arrived at midnight, and after a hurried consultation, it was decided that the hemorrhage was from a large gastric vessel perforated at some point by erosion; also, that death was certain; and finally, that I should continue the fight with ergot, erigeron, cold, stimulants, etc. Dr. P. left for home after a short stay, considering that the woman was *in articulo mortis*. Left now to ease, if possible, the rapidly shortening passage to eternity, I proceeded to give attention to that which required it most—the agonizing pain in her back.

This, as subsequent events will show, proved to be nephritic, and gradually diminished under a powerful, perhaps reckless, dose of opium. The bloody emesis ceased about 4 A.M., and day dawned, not on a dead woman, but upon one bloodless, pallid, weak almost to syncope, with nothing of vitality remaining but the strength of indomitable courage.

My treatment during this long and dreadful night embraced fluid extract ergot, oil origeron, reinforced in the morning by full doses of opium with subnitrate of bismuth. The wonderful nerve and resolution exhibited by my charge created a belief that her life might yet be saved, if bleeding did not again occur. At dawn I sent for Dr. Parish, who came promptly, rendered me much valuable assistance, and again placed the patient in my special charge, being himself unable to give the close attention demanded by Mrs. H's. perilous condition. The nephritic back pain being still present, and not correctly appreciated, our "gastric ulcer" diagnosis was adhered to, and general treatment arranged accordingly. Ergot hypodermically, bismuth, and as the stomach regained some power, a beef preparation, were considered the best exhibit we had to offer, and carried her nicely over about a fortnight, when, medical attention being no longer needed, she was surrendered to her relatives.

I did not see her, after handing over the case to nature and her reparative processes, during twelve or fifteen days. In this lapse of observation another trouble developed which fully explained the misleading back pain, convincing me that my first diagnosis was correct, and that here was another for Dr. Coles, not one of gastric ulcer. Dropsy appeared, made rapid progress, and at last, by request of friends, a consultation was held, participated in by Dr. W. A. Monroe, Dr. G. W. Murphy, Dr. John E. Parish and myself. The decision was that the exudation was probably of renal character, and that the power of medicine should be tried before resorting to operation. Dr. Parish now resumed charge of the case, and after unsuccessfully using our most reliable means for reduction, the gentlemen I have named, only Dr. Monroe being absent, met again, and after thoroughly discussing the case in all its phases, paracentesis was performed, Dr. Parish operating, and a large quantity of fluid removed, in which albumen showed plainly.

Mrs. H. now slowly passed on to recovery, peritonitis often threatening, but yielding readily to the magic of good opium. She is at present in robust health, and will be hemorrhagic whenever a prolonged interruption of catemenial discharge shall force through some weakened spot in a blood vessel the flood of a new vicarious menstruation.

I present my record of this remarkable case, to be considered by those interested in the study of medical problems, this variety in particular, which I have failed to find noted by modern authorities, though accurately described in several

old works on Practice. Dr. Slack, of Boston, once a magnate in the profession, writing on the subject twenty years ago, says, "vomiting of blood is more common among women than among men. It commences with pain and distress in the pit of the stomach, sickness, restlessness and weakness. There is a sense of extreme fullness of the stomach and a dying sickishness, which are somewhat relieved by vomiting, but return again every hour or two. There is almost a constant nausea and retching. After throwing up more or less of blood there will be a short respite, but spasms and vomiting soon return again. Death will ensue from vomiting of blood, but not often. Medical writers have assigned a great many reasons for bleeding at the stomach, but none appear to be entitled to any great weight. Most probably the stomach is in a similar state to the lungs and lining of the nose when bleeding takes place from those organs. *A sudden suppression of the menstrual discharge is supposed to occasion this affection of the stomach.*"

If mine was not a case of vicarious menstruation (the natural result of natural causes, plethora, pressure and rupture), then that abnormal condition is a chimera, and it must have been gastric ulcer, cured after erosion of a vessel large enough to permit the escape of blood in a deluge. That a severe nephritis complicated, adding hydro-peritoneum and threatened peritonitis to the dangers arising from extensive hemorrhage, is a matter of fact which may furnish some light for investigation in their search after a causative lesion.

A. W. Sawyer, M.D.

Arbela, Mo.

Obscure Abdominal Tumor.

Ed. Med. and Surg. Reporter:—

Early this spring I was present at a consultation over a case of Dr. J. G. Cunningham's, of abdominal tumor, Dr. Stewart and myself being the consulting physicians. The case has been thought worthy of reporting, and the following is the history as laid before the Armstrong County Medical Society:—

The patient, Mrs. C., was then 62 years of age, slim, delicate, anæmic. Temperature, pulse, respiration and urine normal, in fact, no complaints of pain or symptoms of disorder, except a lump in the upper umbilical region a little to the right of the median line. This we examined carefully; there was no pain or tenderness, slightly movable; firm but not hard; on pressure pulsation was detected, and even when grasped and raised up the pulsation was quite plain, but did not seem to be in the substance of the tumor, so it was concluded to be the abdominal aorta. The tumor was noticed about a year before, and was then further to the right, and now a band could be felt deeply situated, extending from the tumor to the right, and stopped about the edge of the ribs or under the liver. Previous history was good. No intestinal obstruction, pain, jaundice or other symptoms of difficulty with the liver or its appendages, no swelled glands in the neck or axilla, no history of carcinoma in the family, no uterine or kidney disorders, no subjective symptoms, in fact, but inconvenience from the size and locality of the tumor, which was three inches in diameter, and being situated where the bands of the clothing went around it, or above it, it was desirable to have it lessened, if possible. The patient had a more than ordinary degree of culture and intelligence. She gave a definite account of her case, and seconded every effort to obtain a correct diagnosis. She followed our directions to the letter.

Our diagnosis, after deliberation, was an innocent tumor from enlarged lymphatics, which led to a rather favorable prognosis, provided, however, that the tumor did not break down and empty into the cavity of the peritoneum.

The treatment consisted of tonics and alteratives, quinine, iron, and iodides. External applications had been made of iodine, etc. with no appreciable results, so they were discontinued.

Several weeks after this, intestinal obstruction occurred, tympanites, some pain; no particular tenderness, but retching and vomiting glairy mucus: lime water and milk was finally retained, but nothing else would stay. Dr. Wallace, of East Brady, was then called in and the diagnosis was confirmed (none of us were absolutely certain), but the prominent symptoms were treated, pain relieved by suppositories of morphia and atropia, and a few days of comparative tranquillity followed, when she threw up a great mass of grumous, thick liquid, fetid and ropy; then she rallied; the tumor got smaller; the swelling went down; the tympanites subsided; we entertained great hopes that recovery would speedily follow, as evidently the tumor had opened into the bowel, and the contents would very likely all be discharged in that way, but the constipation continued; this was about the 10th of June.

On the 18th of July, I was summoned to see her, Drs. Cunningham and Stewart both being away from home. Something had suddenly broken inside, and I found her in a state of collapse, suffering intense pain. I gave an unfavorable prognosis, with a bare possibility of the break having occurred into the bowels; sedatives were administered hypodermically, and other means used to restore her, but she died before midnight, without rallying from the shock, her mind being perfectly clear to the last.

Dr. Cunningham made a post-mortem examination, assisted by Dr. Stewart and myself. On opening the abdomnial cavity the surface of the intestines was found covered with fæces. The tumor was plainly visible, black and smooth. The intestines were cemented together all around it, and on dissecting it up, it proved to be the gall bladder: its walls were gristly, and it was divided into two parts, one imbedded with calculi, five being found which were three quarters of an inch in diameter; the other half was distended with bloody pus and bile. The walls were tightly adherent to the duodenum, and a hole in this bowel, just under the cyst, showed where a calculus had worked its way through the adjacent structures, producing a subacute inflammation as it went, solidifying the mesentery, bowel, and the head of the pancreas, and finally escaped into the cavity of the abdomen.

M. H. Alter, M.D.

Kittanning, Pa., July 30, 1881.

Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

Will you allow me to indulge in a few remarks on "Maternal Impressions?" About thirteen years ago I attended a Mrs. H., in her first labor. Delivered the child with the forceps. No questions asked by the mother. The child had only one eye. Eyelids with lashes on right side were formed, but smaller than those of the left side, and no eyeball. I asked the mother whether she knew a cause for the deficiency, and she could at the time recollect none. She wondered whether I had not destroyed the eye with the instruments! I told her that such was not the case, since no wound could be shown to prove such a result. On my visit next day, she remembered that when she had passed her third month of pregnancy, she had an intolerable itching of her right eye; that she often stood before the looking glass and rubbed the eye with the knuckle of her index finger. The child's eye had the appearance of suspended development, occurring about the fourth month of its fœtal existence. Mrs. H's second child was born with red hair, fair skin, afterwards covered with freckles. Both parents have dark complexions and black hair, and to the best of their knowledge, no red hair among either of their relatives. During her second pregnancy, on a certain Sunday, she stood behind her future brother-in-law, who had a head full of fine, fiery red hair, and admired its beauty. When her child was born it had a head full of fine, fiery red hair. Another child, born a year and a half later, by the same parents, also had fiery red hair. The first child, and three others, born subsequently, at intervals of two years, all have black hair and dark complexions. In their other features the children all resemble each other, excepting the hair, complexion and freckles.

Prof. Dunglison, during his lectures delivered at the Jefferson Medical College, Philadelphia, mentioned the instance of a male zebra and a female horse meeting at a certain watering place, the mare being at the time in heat. Connection followed, and the offspring, when born, had all the stripes of the zebra. The following spring the same mare was served by a male horse of her own color, and the offspring as in the first instance, had the stripes of the zebra. Prof. Dunglison ascribed the zebra stripes on the horse colt to the impression made on the female ovaries during her first meeting of the zebra. Be this as it may, I feel convinced that these occurrences are not accidental, but incidental to a certain law of nature. Dr. C. H. Shivers asks: "Pregnant women always long for something unattainable; why, then, are not children more frequently marked by these longings?" For the same reasons, Doctor, that not every woman is impregnated who has a fecundated ovum passing into her womb; or for the same reason that a person passing or sitting in the focus of a camera obscura, with all the chemicals in place, not a sufficient length of time, will not leave any, nor a desirable, nor a perfect image or impression upon the plate. To produce a maternal impression, or mark, upon her child, physical or intellectual, the mother's mind must become perfectly absorbed in the object before her, and remain so for a certain length of time, the same as the photographer will tell you, keep still, "look on one spot, don't change your position until I tell you;" Or, as the mesmerist will say: "close your eyes, keep your mind fixed on one thing for a certain length of time, and count from one to ten, over and over again, until I tell you to stop." Or, as the Methodist knows that a certain excited and fixed condition of the mind of his subject is necessary to favor conversion, the enlivening song and the power of prayer is resorted to, to bring about the desired result. Position, time and mind, produce these changes, and since not all minds work similarly nor in harmony, the natural results are not all the same.

F. R. BRUNNER, M.D.

Bechtelsville, Pa., July 31st, 1881.

NEWS AND MISCELLANY.

Proceedings of the International Medical Congress.

The Congress was formally opened on Wednesday, August 3d, by the Prince of Wales. The total number of members present was about 2500. Sir William Jenner, K.C.B., took the chair, as chairman *ex officio*, and delivered a brief opening address.

Sir J. Risdon Bennett moved a resolution appointing Sir James Paget President, and Mr. William MacCormac General Secretary, and the several gentlemen whose names were mentioned in the report as Vice-Presidents of the Congress, and Vice-Presidents of the various Sections, and all the other officers. He referred to the very complete literature of the Congress which had been prepared. While he was welcoming, in very good French, the foreign delegates, the Crown Prince of Prussia arrived, and was greeted with great heartiness and cordiality by the immense assembly.

Professor Donders, of Utrecht, seconded the resolution, paying a compliment to British skill and talent in organization, as evinced by the arrangements of the Congress, and prophesied from its sittings valuable additions to medical science.

The resolution was carried by acclamation; and then a brief formal address was delivered by the Prince of Wales.

The President, Sir James Paget, having now taken the chair, proceeded to deliver his Inaugural Address.

After Sir James Paget's speech the first general meeting of the Congress was dissolved; and from and after 3 P.M. the various sections were constituted and began work.

At 4.30 in the afternoon of the same day the second general meeting was held in St. James' Hall, under the presidency of Sir James Paget, when Professor Virchow, of Berlin, delivered, in German, to a large and most appreciative audience, an address on the "Value of Pathological Experiment."

On Thursday, the 4th, the third general meeting of the Congress was held in St. James' Hall, when the address prepared by the late Professor Maurice Reynaud (of Paris), on "Le Scepticisme en Médecine, au temps passé et au temps

présent," was read by Dr. Féréol, his intimate friend. The fourth general meeting took place on the 5th inst., when Dr. Billings delivered his admirable address on "Our Medical Literature," to a very large and highly appreciative audience. The fifth general meeting did not take place till Monday, the 8th. On that day the general address was from Professor Volkmann, on "Modern Surgery," and in the course of his address he paid a high tribute to Professor Lister as the discoverer of the Antiseptic System—a system which has been very widely, and one may say enthusiastically, adopted in Germany, with the happiest results. On this day also, before Professor Volkmann's address, Professor Pasteur (of Paris) described at length, and with eloquence as well as precision, his researches and discoveries on the vaccination-like protection of animals from infectious diseases.

The final meeting of the Congress was held in St. James' Hall, on the afternoon of Tuesday, August 8th. The Great Hall was filled, and the first proceeding was the delivery of an address by Professor Huxley, on "The Connection of the Biological Sciences with Medicine." After the address, Mr. Mac Cormac read a short report of the work of the Congress, from which it appeared, that 119 meetings of sections had been held, at which 464 written and 360 spoken communications had been made. Sir James Paget, the President, then submitted to the meeting resolutions which had been received from the Physiological and Ophthalmological Sections, promising that if any dissented from the first their names would be recorded. The resolution, which had been most carefully discussed and considered, sent by the Physiological Section, was in the following terms: "That this Congress records its conviction that experiments upon living animals have proved of the utmost service to medicine, and are indispensable for its further progress; that, accordingly, while strongly deprecating the infliction of unnecessary pain, it is of opinion that, alike in the interests of man and of animals, it is not desirable to restrict competent persons in the performance of such experiments." This resolution was received with great applause, and was declared carried without a single dissentient, a unanimity of opinion which was probably partly due to Professor Virchow's address.

Sir James Paget then explained that the views of the Ophthalmological Section were about to be drawn up in due form by a small committee, and placed in the hands of the Executive Committee of the Congress. Meanwhile, the Section recommended that their resolutions should be adopted as acts of the Congress, in order that they might be forwarded, through the Secretary-General, to the President of the Board of Trade, the First Lord of the Admiralty, and the Secretary of State for Foreign Affairs, with an expression of the desire of the Congress that they should be favorably entertained, and, if approved, be recommended for adoption by foreign governments. A resolution to this effect was also agreed to unanimously.

On the motion of Mr. Bowman, seconded by Professor Lister, medals of honor were next presented to the Professor of the last Congress, Professor Donders (of Utrecht); to the General Secretary, Dr. Guye (of Amsterdam); and to the readers of general addresses in the present Congress—Dr. Féréol (of Paris), Dr. Billings (of Washington), Professor Volkman (of Halle), Professor Huxley (of London), and Professor Virchow (of Berlin). And it was resolved also that a medal should be sent to the widow of the lamented Dr. Maurice Reynaud, who had written, and was to have delivered, the address on "Le Scepticisme en Médecine, au temps passé et au temps présent," which had been read by his friend, Dr. Féréol.

Votes of thanks, at the instance of Professor Lagenbeck, Professor Charcot, Professor Donders, Dr. Billings, and others, were then passed to Mr. MacCormac, Hon. Secretary-General, and to his assistants, Mr. Makins and Dr. Coxwell; to others, medical and lay, who had helped to make the Congress successful in every way; and to Sir James Paget, President of the Congress. All these votes were heartily passed by the meeting; and Mr. MacCormac, on rising to express his thanks, was received with warm and richly-deserved applause.

Sir James Paget, in bidding the members "Good-bye," stated that the Executive Committee would take into consideration the time and place of next meeting. They had received an invitation from the King of Spain to hold their next meeting in that country, but there was a desire on the part of many that one of the Scandinavian capitals should be selected.

The meeting in every respect was thoroughly successful, and the social features which it presented were of the most agreeable kind, and added much to the charm of the occasion. Abstracts of some of the more important and generally interesting work done in the Sections will be given in subsequent issues of the REPORTER.

Reigning Diseases in Paris.

Each quarter M. Besnier presents to the Société Med. des Hôpitaux a report on the diseases most common during the quarter, and any peculiarities they may have presented.

During the first trimester of 1881, the general mortality in the hospitals was much larger than usual, but this M. Besnier considered due to the great extension of hospital services during the present year. Affections of the respiratory organs (particularly pneumonia) were of exceptional gravity. This last disease determined the very advanced mortality of 42 per cent. Diphtheria, less common than in the corresponding period of 1879, caused 543 deaths, against 514 during the first trimester of 1880.

The eruptive fevers have proven, as M. Besnier has already observed, of greater gravity during the winter months. The mortality for smallpox was 24 per cent., but the disease has been much less prevalent. Instead of 798 deaths in 1880, it caused but 356 deaths during the same period of 1881. In face of the many arguments latterly brought forward against vaccination, the report of M. Landrieux, who conducted the smallpox service at the St. Louis Hospital, is of special interest.

The mortality among those who had never been vaccinated reaches the terrible proportion

of 70 to 80 per cent.; while for those who had been vaccinated during childhood, no matter how long before, the mortality was but 10 or 15 per cent. Measles, according to M. Archambaud, proved of great benignity among private patients, but in the Children's Hospital, in the service of M. Labric, 21 out of 36 succumbed. Thirteen of the patients contracted the measles in the hospital (a strong argument for the isolation of such patients in similar institutions). Almost all of them had broncho pneumonia, and nine died from croup, but one presenting any sign of this malady when brought into the service. Among 15 patients with scarlatina at the Hôpitaux des Enfants Malades, 7 had contracted it while at the hospital, and 3 of these 7 succumbed.

Typhoid fever was much more common than usual at this period of the year. It is generally in spring time that the greater number of cases are observed; but this year and last year, instead of declining at the beginning of the winter months it seemed to undergo a recrudescence.

The Surgical Institute.

The establishment at the corner of Broad and Arch streets, in this city, known as the National Surgical Institute, has heretofore been under such management that the regular profession could not give it their patronage and approbation. This, we are glad to say, is now changed. It has been taken charge of by a well known physician of this city, who will hereafter conduct it in a manner that will be strictly in conformity with professional propriety. The Institution has exceptionally good facilities for the successful management of many surgical diseases, and will be found to offer resources not easily obtainable elsewhere for the treatment of many cases. An advertisement of its present management will be found in our issue of to-day, and we recommend it to those physicians who are on the lookout for a proper place to send patients needing these special therapeutic maneuvres.

Tri-State Medical Society.

The Seventh Annual meeting of the Indiana, Illinois and Kentucky Tri-State Medical Society, will be held in the city of St. Louis, Mo., Tuesday, Wednesday and Thursday, October 25, 26 and 27, 1881.

The profession of the "Mississippi Valley" are cordially invited to attend.

G. W. Burton, Secretary.

OBITUARY NOTICES.

EDMUND L. PETTINGILL, M.D.

Died in Hancock, N. J., last month, at the early age of 31 years. Born in Hancock, he studied medicine with his father. At Yale College he graduated with the class of 1871, after which he attended lectures at Cleveland, Ohio, and completed his studies at the College of Physicians and Surgeons, in New York city, in 1876. After finishing his studies he returned to Hancock, and commenced the practice of his profession. About a year and a half ago a copartnership of father and son was formed, which was only terminated by the death of the junior doctor. Edmund L. Pettingill has won the confidence of a very large circle of acquaintances and patients. As a surgeon he was thought to rank with the best. His early and sudden death leaves a young wife bowed with sorrow, and an aged and loving father and mother stricken with grief.

—Dr. Ira Hutchinson, the oldest physician in Middlesex County, Connecticut, died at Cromwell, on August 10th, at the age of eighty-one years. He had been in continuous practice for fifty-six years, a part of the time in Haddam, and earlier in Farrington. He went to the latter place upon leaving the Yale school. He had been President of the Connecticut Medical Society, and was one of the best known old school physicians in the State.

QUERIES AND REPLIES.

Impotence.

Mr. Editor:—I will ask Dr. J. D., Mo., to use nothing but tr. staphisagria. I have given it for impotence in all my cases; have never known it to fail once, and have used it for a number of years. J. T. V. Blockson.

Delaware.

[While I was a student under the late Dr. J. M. Houston, graduate of Maryland University, he appeared to me to have a number of "impotent cases," and his treatment was staphisagria, and was always successful, hence, I give my experience. J. T. V. B.

Dear Sir:—Is it honorable, or professional, or according to the Code, for B. to step in and take charge of a patient, when A. had just been discharged by note, only having seen patient two hours before, and prescribed; without B's. consulting A. in regard to diagnosis, and what medicine he had given. Can B. do justice to himself or the sufferer without knowing what A. has already given? By answering the above in the Reporter, to the pseudonym "Medicus," you will greatly oblige a subscriber and a friend. L. J. W., M.D.

Indiana.

Answer.—We do not consider that a physician who is called in after another has been discharged formally and properly, is required to consult with the one discharged. It is optional with him to do so, or not.

Ed. Reporter:—During the summers of 1880 and 1881, there has prevailed in various portions of Texas, and other Southern States, a type of continued fever lasting from three to six weeks. It is evidently a remittent fever, although many physicians have called it typhoid. Quinine has but little controlling influence over the course of the disease, which shows that there is something besides malaria, or rather, some morbid condition produced by malaria, continuing the fever.

Will some physician who has had to contend with this obstinate disease, give us its pathology and its best treatment? W., of Texas.

DEATHS.

Axt.—On August 18th, Dr. Frederick Axt, in the fiftieth year of his age.

Forrester.—On Saturday, August 20th, James C. Forrester, M.D.

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Original Department.

Communications.

COMPLICATED FORM OF TYPHOID FEVER.

BY A. T. LEVICK, M.D.,
Of Woodville, Mo.

We had in this vicinity, and in several other localities of this State, during the last half of 1880, a disease which was epidemic, and I claim, contagious. Scarcely any two physicians agree in regard to its proper diagnosis or treatment. The St. Louis *Courier of Medicine* speaks, no doubt, of the same disease in that locality. The Board of Health of the city of St. Louis, sending out about five hundred circulars to the physicians of the city and vicinity, inviting their opinion relative to a form of continued fever observed in their localities during the past summer and autumn, some sixty-eight responses were received up to January 1st. These replies were carefully sifted by a committee appointed for that purpose. In a report of nearly two hundred cases but five deaths are noted. In this particular there is a dissimilarity with the disease in this locality, for about ten per cent. ended fatally. So wide a difference could not have resulted in the treatment of the cases reported, but more probably from the absence of malarial toxæmia, which, as a rule, complicates most every form of disease in this section, while in the city of St. Louis, from where the vast majority of these cases was reported, the malarial element could not possibly have been so prevalent. A great many practitioners spoke in relation to the difficulty experienced in making a satisfactory diagnosis, and it was variously spoken of as epidemic, specific typhoid fever, remittent fever, approaching the typhoid form, a typho-malarial type of the severest kind, bilious typhoid fever, and by various other names, showing the wide difference of opinion in regard to the nomenclature of the malady. In regard to the treatment recommended in these reports there was no uniformity, but the treatment which seemed to have been attended with the most satisfactory results was the expectant plan, *i. e.*, as little active medicine as possible. As to the value of antiperiodics, various opinions were given, some claiming they were of use and others that they were detrimental.

In the October meeting of the St. Louis Medico Chirurgical Society Drs. Robinson, Moses, Prewitt and others called attention to a peculiar form of continuous fever, apparently beginning as a remittent, but passing into a persistent febrile state, in which quinine was of no benefit, but seemed to produce an undesirable quininism. The cases reported by this Society mostly recovered by a placebo treatment and light diet. I was unfortunate enough to have under my charge the first case of this disease in this locality, and it was soon followed by others in such a manner as to prove to me not only its epidemic character but its contagiousness, and I willingly admit that for a time I was at a loss for a satisfactory diagnosis, and after arriving at a conclusion myself I could not convince, in all cases, my brother practitioners as to its correctness. I will now proceed to give a clinical history of the first case in this region.

Mr. J. A., age 30 years, a farmer, married three years, family history good, and his previous health always excellent, was taken on the evening of July 16th with severe headache and back-

ache, accompanied with cold sensations. July 17th, A.M., felt better; went to town, thirteen miles, with a load of wheat, but grew worse on the road, and was scarcely able to get back home, as he was suffering severely with headache and pains in his limbs and back.

July 17th. No better, and patient of his own accord took a large dose of sulph. mag., which caused profuse catharsis.

July 19th, P.M. I was sent for and received the above history; found the patient suffering with severe head and back ache, and considerable pain in knee joints, tongue covered with a yellowish fur, but rather red around the edges. Temperature 103, pulse 90, full and compressible; no vomiting, but considerable nausea. I then considered the case a severe attack of remittent fever with an unusually slow pulse for a temperature of 103, and the pain confined to the knee joints, being out of the usual order of things in remittent fever, which, by the way, is a very common disease in this region.

Treatment.—I gave a dose of comp. cathartic pills, to be followed in twelve hours with a seidlitz powder, and left the following:—

1. ℞. Sulph. cinchonidiæ, gr. xl
Pulv. ipecac. comp., gr. xxx. M.
Ft. Chart. No. x.
SIG.—One every two hours.

2. ℞. Potassii bromidi, ℥ij
Morphiæ sulph., gr. ij
Spts. aeth. nit.,
Aquæ, āā ℥j. M.
SIG.—Teaspoonful between each powder, until patient's head and back was better or he slept.

Advised cold cloths to head and frequent bathing of the surface while fever was up.

July 20. A.M., temp. 104, pulse 80, tongue about the same, head and back some better. A good deal of nausea, but had not vomited; had now taken forty grains of cinchonidia; bowels had not moved, appetite entirely gone, but he had rested well through the night. The cinchonidia and Dover's were continued every three hours; bromide mixture ceased, as patient thought that was what made him so sick. I gave him in its place a teaspoonful of a solution of chlorate of potassa, and five minims tincture digitalis between his powders, while awake; gave the second seidlitz and ordered same repeated every two hours till bowels moved; continued sponging of the surface with cold water; light diet, principally milk.

July 21, A.M., temperature 104; pulse 76; coat on tongue lighter, headache better, but quininism present, causing a roaring in the ears, and a swimming sensation when raising the head; some little cough; patient had blown some blood out of his nose, which was unusual with him. I found for the first time, this morning, some tympanites; the bladder was distended with urine, patient not having passed any for twelve hours, although having a desire to do so. I could find no iliac tenderness, no enlargement of the spleen, although I searched persistently for these symptoms, as by this time I began to doubt my diagnosis of remittent fever; here was the second day of a steady fever of 103 to 104°, and the patient had taken now about eighty grains of sulphate of cinchonidia, with not even a remission. The patient's bowels had moved three times from the two doses of seidlitz powders; back but little painful; knee joints better, but hip joints somewhat painful now, and some pain in shoulder joints, but there was no swelling, tenderness, redness or pain on moving these joints; nor had there been, although there had been pain from the knee joints up to the shoulders simultaneously on both sides; skin moderately dry only when much nausea.

Treatment.—Hot cloths applied to lower part of the abdomen and changed frequently, which enabled patient to empty the bladder in about half an hour. A mustard plaster over stomach till considerable redness produced, or free from nausea; other treatment continued.

July 21, 10 P.M. A messenger informed me that patient was troubled with retention, having passed but little urine since morning. I did not go to see the case, but directed the application of hot cloths, and if that did not succeed, hip baths.

July 22d, 7 A.M. Temperature 103½; pulse 72, full; skin a little more moist; tongue still coated; patient has been relieved of the retention. I found no tympanites or iliac tenderness this morning; the patient had taken a seidlitz powder yesterday evening, which had moved bowels two or three times; the discharges were thin and yellowish, but not very offensive; no pain in head, back, or joints, but still considerable tinnitus aurium; he had now taken about 120 grains of sulph. cinchonidia, and no remission yet. He had had a slight attack of epistaxis, but no roseola discoverable. Tonic doses of sulph. cinchonidiæ were ordered, with a quarter grain of ipecac. every four hours; tr. digitalis discontinued, and I gave ten drops of tr. gelseminum in chlor. potassæ solutions between each dose, while he was awake. Positive orders were given for him to be nourished regularly on light diet, milk, broths, poached eggs, etc.; sponge baths continued as before.

July 23d, 7 A.M. Temperature 102½, pulse 72,

and weaker; tongue still lightly coated, but moist; throat a little dry at times. Bowels had moved frequently since my last visit: discharges thin, yellow and offensive; no hemorrhage; considerable torpor and tenesmus. Patient was given no treatment for diarrhœa, as I had left no remedies, the bowels heretofore being costive. I found the bowels quite tender, with some tympanites: no further trouble with bladder. Patient was somewhat delirious last night, for the first time, and has been somewhat drowsy this morning, but rational and easily aroused when spoken to; no appetite and no great amount of thirst. Powders of subnit. bismuth and opium were given, to control diarrhœa, turpentine stupes to the bowels, and sulph. cinchonidiæ with Dover's every four hours, alternated with sol. chlor. pot., teaspoonful doses.

July 23d, 2 P.M. Temperature 104, pulse 80; bowels checked and my friend Dr. G. was then called in; his diagnosis was simple remittent fever, to which I could not now agree, as I considered the case decidely in a typhoid condition if not strictly typhoid fever, for which I was in favor of the expectant plan of treatment. But as the doctor was my senior, by about twenty years, I very reluctantly gave my consent to the following treatment:—

Three powders, each containing 3 grs. calomel, 5 grs. of sulph. cinchonidia, 4 grs. of Dover's, one to be given every six hours, and twenty drops of fl. ext. jaborandi twice between each powder, in a teaspoonful of a solution of chlor. potassæ; continued bathing with tepid water till diaphoresis should take place.

July 24th. Temperature 102, pulse 90 and weak, bowels moving involuntarily in bed; he had taken the last mercurial at 5 A.M.; at 10 P.M. yesterday patient had two free actions from bowels, then at 3 A.M. they had commenced again, and had been moving involuntarily since. He had sweated profusely during the night, with some little flow of saliva, and was extremely prostrated. I had patient cleansed from head to foot, stopped all treatment except what was directed to control bowels, which were checked with an enema of starch water and tr. of opium; gave eggnog, with as much whisky as he could swallow.

July 24th, 2 P.M. Temperature 104½, pulse 90, and weak; continued active stimulation, with hot cloths to bowels, which were now very tympanitic; gave opium and bismuth to keep them under control, and tonic doses of sulph. cinchonidiæ every four hours.

July 25th, 7 A.M. Patient appeared better. Temperature 102, pulse 90; had rested well during night; somewhat delirious this morning; bowels had moved but twice in the last twenty-four hours; kidneys acting tolerably free, urine porter color. 9.30 A.M. Again met counsel. The temperature had fallen, in two hours, from 103½ to 100; pulse of fair strength.

Treatment.—5 grs. of sulph. quinine every three hours, immediately followed by lemon juice and whisky, and between each dose a teaspoonful of a solution of chlor. potassa, containing a little spts. nitre, this followed by eggnog and whisky, free stimulation being still required. Regular and frequent cold sponging; mustard to stomach, to control nausea.

From this time to August 7th the case was apparently running along without improvement; in fact, it seemed at times as if he was moribund; his extremities would become cold and clammy, great drops of sweat would stand on his head and face, he would lose control of his sphincters, but by the use of plenty of alcoholics and a strong, easy digested diet, with a tonic treatment, the symptoms were met as we thought they required.

We had from the beginning of this case laid great stress on the importance of regular nourishment night and day, and it was well we did, for it was not until the fifty-first day of his illness that there was anything like steady improvement, the temperature in the meantime varying from about 100 to 103, but on a few mornings as low as 98½ for an hour or so; most of the time the patient sweated very freely, saturating his clothes and bed, both of which were changed every morning. A strong liquid diet was given about every four hours, night and day; bowels were bathed a few times with tincture of iodine. The tenderness at the last of his illness became circumscribed over the right iliac region, there forming a movable tumor simulating a perityphlitic abscess, in which, on two occasions, we fancied we could detect fluctuation and aspirated with Dieulafoy's aspirator, but succeeded in withdrawing but a small amount of a serous sanguineous fluid, but considerable gas, and the tumor gradually disappeared.

The patient was able to sit up a little on the fifty-sixth day of his illness, and after a protracted convalescence made a perfect recovery.

This is a long, but still a limited history of the first case of this fever in this locality, which formed a nucleus for quite a general epidemic in which all the first cases occurred in those parties who visited and nursed the case in question, to wit:—

On August 6th, Mr. O. A., aged about 25,

brother of the case reported in detail, was taken with about the same symptoms: head and back ache, continued fever, with evening exacerbations, pulse below 100, profuse sweating, tympanites, slight epistaxis, ochre-colored and offensive stools, and profuse hemorrhage from the bowels on two or three occasions; convalescent Sept. 7th.

August 12th. Mrs A., mother of the last two and two following cases, was taken with about the same symptoms and lived about two weeks.

Miss A., aged about 20, was taken August 15th; lived seven or eight days.

Ira A. was taken August 19th; convalescent September 7th.

These cases were in attendance upon case No. 1 more or less, until they were taken, being the mother, brothers and sisters. They were attended by my friend Dr. G., but they were under my immediate observation; and I saw them in counsel with him two or three times.

The next cases were with case No. 1 as nurses and visitors frequently, and were attacked as follows:—

M. C., æt. 20, brother-in-law, August 7th. Mrs. C., mother-in-law, August 10th. James R. and wife, brother and sister-in-law, August 20th.

These cases all recovered after a continued fever of from fourteen to twenty-eight days, with symptoms similar to the first case, and were all family relations.

Outside of the family, but in those who acted as nurses for the first attacked, we had fourteen more cases, most of which were under my care, and I had no case but what had been with the first attacked. There was in the neighborhood perhaps a dozen more cases under the treatment of Drs. P. and P., but the symptoms and course were the same. I was fortunate; I lost but one case in those I treated, and that was a child of a tubercular diathesis, who, after a severe attack of the fever in question, took tubercular meningitis, from which she died during this epidemic. We still had cases of remittent fever, from which it was perplexing to make a diagnosis, and I settled down on about the following treatment, from which I claim as good or better results than the majority of physicians had.

Some of these cases would be taken suddenly, while others would have a prodromic stage of several days. But I invariably commenced my treatment by giving from thirty to sixty grains of cinchonidia, in divided doses, in the first twelve hours after being called, with a cathartic (not a *mercurial one*) if needed. With some Dover's added to the cinchonidia, if in any particular pain or restlessness at the end of twenty four hours. If remittent fever, we would at least have a decided remission, but if not, and the symptoms continued, perhaps, with more tympanites and a pulse of seventy to ninety, while we had a temperature of 102½ to 105, with considerable sweating, hypercatharsis of offensive yellow discharges, we justly concluded we had this continued fever to contend with, which I treated rather on the expectant plan; bathing the patient with water and vinegar of a temperature that felt pleasant to the patient, whenever the thermometer indicated a temperature of 103 and over; a slop diet, poached eggs, milk, animal broths, etc. I would apply turpentine stupes, followed by cloths wrung out of hot hop tea, when much tympanites, or tenderness, and would give a teaspoonful of turpentine emulsion, containing from five to ten drops of turpentine, every four hours. I directed patients to always pass wind from the bowels, when so inclined; if bowels did not move every forty-eight hours, I moved them with an emulsion of castor oil and turpentine; if too active I used subnitrate of bismuth and tannin, or opium and acetate of lead, with enemas of tr. opii in starch water, using the second remedies if the first did not succeed. I gave regularly tonic doses of quinine every four hours, with Dover's added, if indicated by pain, want of sleep, or restlessness. I followed each dose with about twenty-five minims of dilute nitro-muriatic acid, sweetened and flavored with a little oil of lemon dissolved in alcohol, this, ice-cold, was a pleasant drink to the patient, cooling, and dissolved the quinine just taken, and no doubt exerted a good effect on the disease in question. This treatment, with due attention to cleanliness, fresh air, and the regular administration of nourishment, with stimulants, if required, and some cases needed them towards the end of the disease, while others required none at all. To the first case reported we had to give it early in the disease, but I am inclined to think it was required to support the patient over the continued active treatment, rather than the requirements of the disease. It being the initial case, we continued to try to abort it, till we nearly aborted our patient.

In some of these cases we found a few red spots on the breast and back, but in the majority of the cases none were observable. A little bronchitis in most of the cases, also enlargement of the spleen.

In conclusion, I would state, that in my opinion, based from my library more than experience, this disease was a type of typhoid fever, and

this incomplete report of cases proves its communicability from one to another, which is at present a question sub judice in the minds of the learned lights of the profession. I have done my best to curtail this report, but although incomplete, its length has far extended the limits first intended. No autopsies could be had.

PREVENTION OF VESICAL CALCULUS.

BY W. S. ROSS, M.D.,

Of Connellsville, Indiana.

The great aim at the present age is to prevent as well as cure disease.

Boards of Health have been established all over the country, for the purpose of improving the health of our citizens. It is a noble movement, and should receive the sanction of all health-loving people. He who cures disease is a great benefactor of the human race, but he who prevents disease is a greater one. There is no disease to which the human family is liable that causes more intense suffering than a stone in the bladder. This disease may, in nine cases out of ten, be prevented if known to exist in the first stage. The urine in the first stage of this disease contains crystals of uric acid or the phosphatic, etc.

If uric acid crystals are in the urine before it gets cold, or within six hours thereafter, the patient is liable to have a stone form in the bladder, with all its train of symptoms.

This can be ascertained by the use of the microscope. This known, remedies can be used to neutralize and eliminate the same from the system. The treatment of such cases had always been very unsatisfactory until the use of the microscope and other means were devised. The microscope will reveal the fact that there is material in the excretion to form gravel, and unless removed, it will produce a stone. With the instrument I have devised, and the microscope, a stone should not be allowed to form in the bladder. With this instrument the bladder can be so thoroughly washed out with medicated water that it would be impossible for a stone to form. It will throw a continuous current of water through the bladder, and wash out all foreign substance that will enter the inlet of the instrument. With this instrument all diseases of the bladder can be successfully treated. The formation of stone in the bladder can be prevented, and stone removed, by the timely use of this instrument. I have said before, and I say again, that the time is not far distant when lithotomy will be a thing of the past. The operation of lithotrity while the stone is small, and this instrument to prevent the formation of stone, will supersede it.

I have met with quite a number of such cases, in my practice, both in the male and female. I will give one case for an illustration.

I was called to see Mrs. N., 39 years of age, the mother of nine children, the youngest five years of age. I found the patient very anæmic and an intense sufferer from her bladder. She stated to me that she has been suffering with her bladder for nearly four years. She has passed a great many gravel, from the size of a pea to mere sand. Her suffering has been increasing, and calls to micturate have become more frequent and painful; at the present time nearly every fifteen minutes. On examination of the urine that she passed during the night, I found it very scanty (not more than 64 c.c.), high colored, and containing clots of blood and a quantity of mucus. It also contained gravel. On examination under the microscope, I found triple phosphates and bacteria in abundance. This ascertained, I tried several substances in the urine, particularly acids, in order to see what would destroy bacteria, and at the same time dissolve the gravel. I found that 0.666 c.c. of nitric acid to 8 c.c. of urine would partially destroy them and neutralize the alkali. I found that 1.333 c.c. of sulphurous acid to 8 c.c. of urine would destroy them, but would not neutralize the alkali. I also found that 0.033 gm. of sulph. quinia would destroy bacteria. This ascertained, I, on the 16th day of May, 1881, washed out the patient's bladder with warm acidulated water, about equal to normal urine. The patient was thoroughly under the influence of chloroform, and I examined thoroughly, with the sound, for stone, but could not detect one, but a semi-solid mass. The patient suffered considerable pain. I ordered opium and directed her bowels kept open with saline cathartics, and to take the following mixture every three hours:—

℞.	Citratis potassæ,	16.gm.	
	Tr. buchu,	32 c.c.	
	Aquæ puræ,	32 c.c.	M.

Sig.—Teaspoonful as directed above.

The patient's bladder has been washed out every day with warm acidulated water, since the treatment was begun. After a few days' treatment the pain subsided very much. The urine is still alkaline, and contains but little mucus, and slightly colored with blood. A very few gravel have passed during the last few days.

May 26th. On visiting her this morning, I asked her how she felt. She remarked: "Doc-

tor, I don't know whether I am better or not, but I slept all night, a thing I have not done for two years. Didn't you give me something to make me sleep." I said no. She then said: "I must be better." The patient passes about 512 c.c. of urine during the night, and the same quantity during the day. It has cleared up very much. On examination of the urine to-day, under the microscope, there were a few bacteria to be seen, and but little colored.

May 27th. Patient suffered more last night than she has for some days. Her bowels were constipated and she took cathartic pills, which acted once, and relieved her very much. The urine passed through the night was scanty and high colored, and contained some mucus and clots of blood. I washed out the bladder with warm acidulated water. On testing the water that passed through the bladder, I found it to be alkaline, although acidulated water had just passed into the bladder, showing conclusively that not enough acidulated water had been passed through the bladder to neutralize the alkaline substance contained therein. I examined several pieces that were washed away from the bladder this morning, and found triple phosphate crystals.

May 28th. The patient rested well through the day and night. Calls to micturate not more than half as often as a week ago. She has appetite; took beef steak for breakfast. Urine, on examination, is found high colored; passed 512 c.c. and it contained no blood clots, but some mucus. I washed out the bladder with acidulated warm water; passed over 256 c.c. through the bladder, which brought away several small gravel. On testing the water that passed through the bladder I found it slightly acid, the first time since the treatment was begun. On examination of the gravel passed this morning I found them to be triple phosphates. Continued treatment.

May 29th. Patient passed 512 c.c. urine during the last twelve hours, no blood, but some mucus, not so high colored. The patient was called to micturate twenty-one times during the last twenty-four hours, and her suffering is very much mitigated. Appetite good. I ordered nitro-muriatic acid bath for her feet and legs, to be used every night, and continued twenty or thirty minutes. I washed out the bladder this morning with warm, acidulated water, which returned acid, bringing with it considerable gravel. Continued former treatment.

May 30th. The patient passed a comfortable day. Voided 512 c.c. urine during the day, and 640 c.c. during the night, with but little pain attending the passage, and none after. On washing out the bladder this morning, very little mucus followed, and no gravel. The water returned acid. Continued treatment.

May 31st. The patient passed 512 c.c. of urine during the last twenty-four hours. Sp. gr. 1.022. Contains no blood, but some mucus. Voided urine seventeen times during the last twenty-four hours; still alkaline, but no gravel passed. I washed out the bladder as above. No gravel passed. Continued treatment.

June 1st. The patient voided urine nine times during the day and six times during the night. Passed 1056 c.c. during the last twenty-four hours. Sp. gr. 1.021. On examination of the urine there was no gravel, but it was strongly alkaline and contained bacteria.

I washed out the bladder this morning as usual, but no mucus or gravel passed. The water returned acid. The above treatment was continued.

June 2d. Patient voided 1088 c.c. of urine at fifteen micturitions during the last twenty-four hours. She slept well during the night. Bowels keep regular without cathartics. Omitted washing out the bladder this morning. Continued treatment.

June 3d. The patient voided 1024 c.c. of urine during the last twenty-four hours. Was called to micturate fifteen times; suffered but little pain. The urine contained some mucus and still alkaline. Omitted washing out the bladder this morning. Continued treatment.

June 4th. The patient voided urine twenty-one times during the last twenty-four hours; passed 1056 c.c.; no blood, but little mucus, no gravel. I washed out the bladder as usual this morning; no gravel passed. Still alkaline, but very much improved in general appearance. On examination of the urine drawn off with the catheter there were very few bacteria to be seen. Continued treatment.

June 5th. The patient had a good night's sleep. Voided 1024 c.c. of urine at sixteen micturitions during the last twenty-four hours. It contained a few bacteria, and is still alkaline. She has a good appetite, and her bowels keep regular without cathartic medicine; passed a few small gravel. I washed out the bladder this morning, and it contained no blood, but a little mucus. Continued treatment.

June 6th. The patient voided urine four times yesterday and six times last night. Passed 1056 c.c. of urine during the last twenty-four hours. Very little pain attending it; but little mucus and blood. No gravel. I drew off with

the catheter 32 c.c. of urine; it was clear and contained a few bacteria, also a little mucus; no blood. I washed out the bladder with warm acidulated water, and it passed out almost as clear as when it went in, except a few shreds. Her bowels keep regular; appetite good. She walked out several hours yesterday. Continued treatment.

June 7th. Patient suffered considerable pain yesterday and last night. Passed but little urine during the last twenty-four hours; high colored. Passed some gravel. She attributed her suffering to too much exercise on yesterday. I omitted washing out the bladder this morning, on account of the soreness of the bladder.

I put her on the following prescription:—

℞. Iod. pot., 0.30 gm.
Acetatis potassæ, 1.00 gm.
Sig.—In water every four hours.

Also—

℞. Pulv. Dov., 0.50 gm.

as required, to relieve pain.

June 8th. The patient rested well after taking one dose of Dov. and potassium mixture. She went several hours without voiding urine, and when she did, it caused very little pain, and she passed 256 c.c. of clear urine. Micturated only three times during the day, and twice during the night. It contained but little mucus and no blood. She slept nearly all night. I drew off with the catheter 32 c.c. of urine; it contained no mucus, but a little pinkish color from blood. On examination, I found it alkaline, and it contained bacteria. I washed out the bladder as usual, and a quantity of phosphates were washed away. Continued treatment.

June 9th. The patient suffered some pain yesterday; passed urine nine times during the day; quantity 256 c.c.; passed urine during the night seven times; quantity 92 c.c.; it contained mucus and gravel. I washed out the bladder as usual this morning, and a quantity of phosphates came away. Continued potassium mixture and acid foot-bath.

June 10th. Patient voided 640 c.c. of urine during the day, with but little pain. Urine still alkaline. I washed out the bladder as usual this morning, and some gravel and clots of blood passed. Patient took but one dose of anodyne during the last twenty-four hours; not necessary.

June 11th. Patient voided 640 c.c. of urine during the day, and 512 c.c. during the night. Suffered some pain in micturition; passed a quantity of triple phosphates, no blood and but little mucus. I collected the deposit of phosphates and dried and weighed it; 0.800 gm. Of course fully half was lost in collecting. I omitted washing out the bladder this morning. I put her on 0.30 m. nitric acid in 2 c.c. tr. gentian three times a day, in half a glass of water. The patient's general appearance much improved; has color in her cheeks, and has appetite. Continued foot-bath.

June 12th. Patient passed urine nine times yesterday; quantity, 736 c.c. Voided 604 c.c. during the night. It contained very little mucus, and was slightly colored with blood. Still alkaline. I washed out the bladder as usual, and the water came away almost as clear as when it went in. It was slightly acid. On examination under the microscope, I found triple phosphates and bacteria. Continued treatment.

June 13th. Patient had a comfortable day yesterday; passed urine freely, with but little pain. Calls to micturate not very frequent; voided during the day 512 c.c. of urine; but little pain attending; no gravel has passed, of any size, but a quantity of sand. Urine still alkaline. I omitted washing out the bladder this morning. Continued treatment.

June 14th. The patient has been comfortable for the last twenty-four hours; has voided a normal quantity of urine, high colored and still alkaline; passed one small gravel and sand. Omitted washing out the bladder. Continued treatment.

June 15th. On visiting the patient this morning I found her sitting up, sewing, and she informed me that she had been sewing for several days. She passed a normal quantity of urine yesterday and last night. No gravel, mucus or blood, but still alkaline. Omitted washing out the bladder, as the improvement is progressing so favorably. Continued treatment.

June 16th. The patient passed a normal quantity of urine yesterday and last night; it contained some blood, mucus, and phosphates. Some pain attending micturition. I washed out the bladder this morning; the water passed out almost as clear as when it went in. The urine drawn off with the catheter was still alkaline. Continued treatment.

June 17th. Patient passed a normal quantity of urine yesterday and last night; very little pain attending; little mucus, no blood, slight sediment of phosphates; urine still alkaline. The patient is attending to her household duties. I omitted washing out the bladder this morning. Continued treatment.

June 18th. Patient passed a normal quantity of urine during the last twenty-four hours; it contained a little blood and mucus; no gravel.

The patient has but little pain in voiding urine. I drew off 64 c.c. of urine from the bladder; it was nearly natural in color, but still alkaline, and contained bacteria. I washed out the bladder as usual this morning; it caused very little pain, and the water returned acid and clear. Continued treatment.

June 19th. The patient voided urine freely yesterday and last night; it contained blood and mucus. She walked out last evening and took ice cream and cake; while out a severe storm came up, and returning home she got damp, and "thinks she took cold," as all relapses are attributed to taking cold by the patient. On examination of the urine under the microscope I found triple phosphate crystals, blood and pus. The urine was still alkaline and contained bacteria. I omitted washing out the bladder, on account of the soreness in the bladder. Continued treatment.

June 20th. Patient voided a normal quantity of urine during the last twenty-four hours, with little pain. The urine was thrown out, as I did not call until in the afternoon, therefore I did not examine it. She says "it had cleared up." I put her on the following prescription:—

℞.	Pot. nit.,	16 gm.	
	Tr. buchu,	32 c.c.	
	Aquæ,	64 c.c.	M.

Sig.—Teaspoonful in water two hours after meals.

The former treatment was suspended, except nitric acid and foot b ıth.

June 21st. The patient voided a normal quantity of urine during the last twenty-four hours. No gravel; but little blood and mucus; calls to micturate not more than once in two hours, with very little pain attending. I washed out the bladder this morning with warm carbolic acid water; it returned almost as clear as when it passed into the bladder. 0.333 c.c. (sol. carbolic acid, 1 to 16) to 8 c.c. of urine destroys bacteria. Continued treatment.

June 22d. The patient voided urine six times on yesterday, and three times during the night; passed a normal quantity; it contained a slight phosphatic deposit; very little pain attending micturition, and none after. She is happy over her improved condition. She remarked: "I slept all night." I omitted washing out the bladder. Continued treatment.

June 23d. The patient voided a normal quantity of urine during the last twenty-four hours; very little pain in micturition, no blood, no gravel, but little mucus. Bowels regular. I drew off 96 c.c of urine this morning with the catheter, and it was clear and almost natural in appearance. I washed out the bladder with warm carbolic acid water, and no gravel or phosphatic deposit came away. Continued treatment.

June 24th. The patient voided 1024 c.c. of urine during the last twenty-four hours, with very little pain, no phosphatic deposit, but a few blood clots. The urine is still alkaline. Omitted washing out the bladder. Continued treatment.

June 25th. The patient voided a normal quantity of urine during the last twenty-four hours; but little pain attending. No gravel or deposit of phosphates. There were a few blood clots in the urine this morning. The patient voids her urine about every three hours. I omitted washing out the bladder this morning, as the improvement is rapid. Continued treatment.

June 26th. The patient continues to improve; voided urine six times yesterday, and four times during the night. Quantity normal; no blood, a little mucus, no gravel or phosphatic deposit. Urine still alkaline. On examination of the urine drawn off with the catheter there were a few triple phosphate crystals to be seen. No bacteria. I washed out the bladder this morning with warm carbolic acid water; the water returned clear. Continued treatment.

June 27th. The patient voided urine, on an average, every three hours; she passed a normal quantity during the last twenty four hours; some clots of blood and mucus, no gravel or phosphatic deposit. She walked out several hours yesterday, and attributes the increase of blood clots to too much exercise. I omitted washing out the bladder this morning. Continued treatment.

June 28th. The patient voided a normal quantity of urine during the last twenty-four hours; no gravel, blood or mucus; very little pain attending micturition. The urine drawn off with the catheter contained a few blood corpuscles, no crystals of triple phosphates, no bacteria. The urine is still slightly alkaline. I washed out the bladder this morning with warm carbolized water; it returned clear. Continued treatment.

June 29th. The patient passed a normal quantity of urine during the last twenty-four hours; no gravel, a little mucus and blood; but little pain in micturition. She sleeps well; voids urine from three to four times during the night. Still alkaline. Continued treatment.

June 30th. The patient voided a normal quantity of urine during the last twenty-four hours, no blood, mucus or gravel; still alkaline, but no crystals are to be seen in the urine drawn off with the catheter. I washed the bladder with

warm carbolized water, it returned clear. Continued treatment.

July 1st. The patient has been comfortable for the last twenty-four hours; passed a normal quantity of urine, no gravel, mucus or bacteria, a few small blood clots. She voided urine only twice last night, and each time from 192 to 256 c.c. Says she is well. I omitted washing out the bladder this morning. Continued treatment.

July 2d. The patient is improving rapidly, she walked to my office to-day, and reports herself well. Continued treatment.

July 3d. The patient passed a normal quantity of urine; no pain, blood or mucus; no gravel. Omitted washing out the bladder; bowels regular, appetite good, urine still alkaline. Continued treatment.

July 5th. The patient is gradually improving. She attended a picnic on yesterday; went to the country at 10 o'clock, A.M., and returned at 5 o'clock, P.M. During the time she voided twice, quantity normal. Urine this morning almost normal appearance, still alkaline. Her appetite is good, and she says she is well. Continued treatment.

July 7th. The patient continues to improve; voids a normal quantity of urine, no blood, mucus or gravel. I drew off with the catheter 64 c.c. of urine; it was clear but still alkaline. I washed out the bladder with carbolized water this morning. There is still a little irritation of the bladder. Continued treatment.

July 9th. The patient is improving rapidly, voided urine twice last night; quantity normal, a little high colored; no pain attending micturition. Suspended treatment, except foot bath.

July 11th. The patient has been gradually improving without medicine, except the foot bath. There is still a slight irritation of the bladder. I directed tincture buchu and acetate potassa continued.

Medical Societies.

THE INTERNATIONAL MEDICAL CONGRESS.

PROCEEDINGS OF SECTIONS.*

Section on Anatomy.

At the first meeting in the Section of Anatomy an introductory address on "The Museum of the Royal College of Surgeons" was delivered by the President of the Section, Professor Flower, F.R.S. Professor His (Leipsic) brought forward the very important proposition that "the number of embryos which have been described are sufficient for anatomists to determine what are the normal characters of the human embryo, and that probably in no normal embryo is there ever a free vesicular allantois." Dr. Allen Thomson considered that the proposition was rather premature, inasmuch as some of the embryos mentioned were undoubtedly pathological, as most abortions must necessarily be. Dr. Thomson, as well as most of the other anatomists present, thought that there was more variability in the amount of attachment of the allantois to the chorion than Professor His had stated. In fact, the general conclusion of the meeting seemed to be that further specimens must be carefully examined before such a general proposition as that of Professor His could be adopted. The remainder of the sitting was devoted to a discussion on the characteristics of human crania in relation to race, and was introduced by Professor Turner in a paper "On the Cranial Characters of the Natives of the Admiralty Islands." The skulls described were eleven complete and one calvaria, all adults; seven males and five females. They were smeared with a red pigment, and one had an artificial nose and eyes modeled in a black material. They had been obtained in March, 1875, by the scientific staff of the *Challenger*, and entrusted to Professor Turner for description. The crania were markedly dolichocephalic; somewhat higher than broad; and while the females were microcephalic in capacity the males were mesocephalic, there being a difference of about 250 cubic centimeters between the two sexes. They approximated very nearly to the skulls obtained from the people inhabiting the coast-line of New Guinea.

On Friday, Professor Struthers described minutely a series of dry and wet specimens, showing a supra-condyloid process. He showed that, although well known to every anatomist in its ordinary form, when it is also of great importance to the operating surgeon, it had been overlooked in its rudimentary condition, which he had found to exist normally in every human subject which he had examined. In these cases it is found as a band or bands of fibres beneath the brachialis anticus muscle. A striking instance of its hereditary transmission was next decided, and the theory of descent referred to as the only explanation of its presence, occurring, as it does, so widely among mammalia, from the ornithorhynchus paradoxus upward to man; in the latter no teleological explanation was available. Professor Flower pointed out that the very variability of this process in the mammalia was in favor of its being transmitted by descent. It may be casually remarked that in the subsequent discussion all the anatomists who spoke regarded the evolution theory as the only possible hypothesis for the explanation of the occurrence of this and similar structures, and no one even ventured on a teleological argument. Professor Leshaft next read two papers: (1) "On the forces which determine the shape of the bones, illustrated by numerous specimens from man and the lower animals;" and (2) "On the Position of the Stomach." He considered that this organ is placed more vertically than is generally supposed, but its oblique position, as shown in Dursy's model, made under the supervision of Luschka, was strenuously maintained by Professors His, Kölliker, and Braune, and by Mr. Holden, who

* Prepared principally from the report in the *Lancet*.

all agreed that a vertical stomach only existed in the young child.

On Saturday the subject of cranial measurements was again brought forward by Professor Benedikt, of Vienna, who described a new method of measurement by means of an instrument which he had invented, and showed some drawings which he had made by this process. Professor Hannover, of Copenhagen, next gave a lucid account of the primordial cartilage of the human skull, and showed several embryonic cartilaginous crania and some special preparations demonstrating that Meckel's cartilages do not unite in the median line, as is generally supposed, but that they are separated by a slight interval, and terminate in a hooked extremity; and Professor Redfern made a few remarks on the insignificance of the question as to whether ossification is preceded by cartilage, or takes place in an original fibrous membrane. Another very important communication was read by Dr. Cunningham, of Edinburgh, on the importance of the nerve supply in determining the homology of muscles in different animals. He considered that attention should be given thereto, as well as to their attachments, but could not go so far as to accept the position of Dr. Ruge, of Heidelberg, who has recently asserted that the nerve supply is an infallible guide in determining these questions. Professors Macalister, Kölliker, Struthers, Turner, and Mr. Forbes took part in the discussion, and showed that the segmentation of the primitive muscle masses was so very different in different animals that questions of homological relationship were very difficult to make certain of, and required great caution in handling, although their study was most interesting and captivating. Dr. Fasebeck, of Brunswick, gave a short description of some exquisite dissections which he has made, to prove the independence of the small or motor portion of the fifth nerve, and Dr. Howard pointed out the anatomical mechanism by which a post-oral passage may be secured for the entrance of air into the lungs in cases of threatened apnœa.

On resuming the business of the section on Monday, Professor Kölliker gave an excellent *résumé* in English of his views on the formation of the embryonic messoderm as seen by him in the rabbit. In this animal he had clearly traced its derivation from the cells of the ectoderm, but thought that it might arise differently in different animals, and so, in some cases, be derived from the endoderm as described by some other embryologists. Even at the earliest periods the cells of the mesoderm resemble connective-tissue corpuscles and not epithelial cells, although subsequently in certain places they may be transformed into the latter. Professors His, Schäfer and Allen Thomson took part in a discussion, after which Professor Kölliker, in response to a request made by Professor Turner, explained his view of the formation of the chorda dorsalis from the mesoderm, and not from the endoderm, as is often supposed. Professor Kölliker exhibited some specimens of embryos in support of his views, and illustrated his communication by some remarkably clear drawings on the blackboard, as he proceeded with his remarks. The Professor next made a communication on behalf of his son, Dr. Theodore Kölliker, "On the Human Intermaxillary Bone." Dr. Kölliker had demonstrated its separate existence in fœtuses of eight weeks old, but at the end of the ninth week it was always fused with the superior maxilla. The number of teeth in the intermaxillary bone was not constant. Mr. Fenwick then gave a most interesting account of the subcutaneous veins of the trunk as dissected by him under the supervision of Professor Braune, of Leipsic. He stated that he had been obliged to make as many as 500 or 600 injections in order to fill the system completely. They might be arranged into three zones: an upper zone running into the axillary vein, a lower zone into the femoral, and an intermediate zone, destitute of valves, emptying themselves indiscriminately into either of the other sets. The communication between the portal system and the epigastric veins by means of Sappey's vein in the round ligament of the liver was also shown. Professor Braune referred to the pump-like action on the venous circulation of the movements of the fasciæ at the points where the veins pass through, and to the arrangement of the valves at these points. The remainder of the session was occupied with a spirited discussion on Anatomical Teaching, introduced by a paper by Professor Struthers, comparing the British and Continental Schools, and another by Professor Keen, of Philadelphia, on the advantages of a systematic use of the living subject in facilitating anatomical study.

On Tuesday, Mr. Knott, of Dublin, began with an exhaustive account of "The Cerebral Blood Sinuses and their Variations." Deviations were frequently found, and their details in forty four skulls examined carefully with a view to relative frequency were laid before the section. Dr. Garson read a paper on pelvic measurements with a view to determining which are the most important for the purpose of comparing the pelves of different races. He thought that transverse measurements at the brim form a better standard than antero-posterior. Comparative measurements of the pelves of fourteen European females, five Australians, and thirteen Andamanese were given in illustration.

Section on Pathology.

In reply to a paper on Tubercle, by Dr. Grancher (Paris), Dr. Wilson Fox pointed out that so many doubts had been of late expressed concerning the nature of tubercle, cases which were formerly called tuberculosis, and which probably are still tuberculosis, are now often entered in the registrar's returns as cases of pneumonia or broncho-pneumonia, or the like, by which means the present time will furnish far fewer cases of death from tubercle of the lungs than past times. His suggestion that the term phthisis should be employed for all such cases seems to meet the difficulty. The discussion on Dr. Grancher's paper gradually lapsed into a discussion on the nature of giant cells; and even here the difficulty of adhering strictly to the lines of the debate was clearly shown. For while Mr. Treves spoke only of the giant cells of tubercle, and maintained that they are only masses of coagulated lymph, Dr. Creighton, who followed him, spoke of the giant cells which are

formed in the normal placenta, and Professor Virchow of giant cells wherever they occur.

Two whole days were devoted to the subject of Micro-organisms and their relation to disease. The duty of introducing the debate was entrusted to Professor Lister. He contented himself with delivering a clinical lecture on sympathetic inflammation and counter irritation. Professor Bastian followed with a very able speech. His contention that micro-organisms may arise by changes in the protoplasm of degenerating or decaying tissues (heterogenesis) was supported by an account of various experiments, and by strong, though possibly not invincible arguments. Professor Pasteur, looking very ill, was obliged to sit at the speaker's bar, yet threw a marvelous energy into his speech. Unable to understand our language, he had, he said, begged Mr. Lister to tell him, in two words, the purport of Professor Bastian's speech. It was, he understood, that micro-organisms may be formed by heterogenesis of the natural tissues. "Never, never," he exclaimed, "are these organisms developed unless from previously existing germs or organisms." Professor Virchow showed how essential it is that the relation of the various micro organisms to one another should be discovered. He believed it possible, by "domestication," to change the nature of certain of these organisms, and told of recent experiments bearing on this matter. On the following day (Saturday) the subject was resumed from a slightly different aspect, by Professor Fokker (Groningen) and Professor Klebs (Prague), the former contending that the forces of the micro-organism, and even its capabilities for good or evil, depend upon the conditions in which it exists, the latter reviewing shortly the various organisms and diseases which appear to be associated with one another.

The discussion on Renal Disease (Monday) failed to elicit any very new or striking facts.

Section on Medicine.

Sir W. Gull, in his presidential address, singled out the chief topics that would be discussed, and following in his lines we may most conveniently convey an idea of the nature and quality of these topics by treating them in groups and dwelling, so far as our limited space will permit, on the main points debated. In the earlier portion of his address, the President had sketched out the share taken by each nation in the early development of medical science, and the proceedings of the section reflected fairly well the different nationalities comprising the Congress, and several papers were read and speeches made in the French and German tongues. The disease of the nervous system, which had the largest share of attention bestowed upon it, was locomotor ataxy. The first paper read was by Professor Langenbeck, upon nerve-stretching in this disease, the author relating successful cases where the operation undertaken to give relief to the pains had ameliorated the actual ataxic symptoms, the inference being that stretching of the sciatic nerve initiated changes of a beneficial character on the spinal cord itself. As Sir W. Gull remarked, this introduced a new idea on the nature of ataxy, and Dr. Ogle asked whether the curative effect of nerve-stretching was proved to occur in cases where the lesion of the spinal cord was primary as well as in those cases where it might be considered secondary to peripheral changes. Professor Eulenberg, of Greifswald, also spoke, and Dr. Brown-Séquard supported the author's views by giving the results of experiments on nerve-stretching which he had found to influence the sensory functions of nerves beyond the region of that actually stretched. Dr. Buzzard, in a paper on certain little recognized phases of *tabes dorsalis*, gave a very clear account of the existence of a class of cases in which the classical symptom of ataxy is absent. Such cases, he maintained, are marked by the absence of the knee-phenomenon and by the presence of *crises gastriques*, and sometimes of joint affection; cases in which the gastric symptoms endured for years and predominated over the other characters of tabes—such as the Argyll-Robertson phenomena and lightning pains—and led to diagnosis of gastric cancer, gout in the stomach, or intestinal obstruction. He also referred to cases where other of the symptoms of tabes predominated, and adopted Pierret's view that the disease is essentially a chronic inflammation of sensory fibres. Dr. Buzzard lays great stress upon the importance of examining for the patellar tendon-reflex in all such cases; and it is to be regretted that time did not permit of a discussion upon his paper.

A paper by Professor Erb, of Leipsic, on the rôle of Syphilis as a cause of Locomotor Ataxy, gave rise to considerable debate; and certainly the author laid himself open to the criticism of proving too much, for, while he found evidence of previous infection in 88 per cent., there were no secondary symptoms in 29 per cent., and he used this as an argument in favor of the unicist view of syphilis. By comparing these statistics with those of other male adults, not the subjects of tabes, he found that only 23 per cent. of these had been infected at all, and but 12 per cent. had secondary syphilis. The conclusion arrived at was that "tabes in 90 per cent. of all cases is occasioned by syphilis as one of its etiological factors," and it may be pointed out that this is in agreement with the previous statements of M. Fournier and Dr. Gowers on the subject. Dr. Althaus, of London, in the debate, said that he had obtained a history of primary syphilis also in 90 per cent. of his cases of ataxy, but of secondary syphilis in 40 per cent., and he contrasted these results with a like inquiry into the antecedents of cases of other nervous diseases taken consecutively. But, as Dr. Gairdner remarked, it was a matter of insuperable difficulty to arrive at a true history of antecedent syphilis, (especially where there were no secondary symptoms) in any large number of cases, and he could accept the conclusions of Prof. Erb, and Dr. Althaus on this ground alone. Opposition to the view of Erb was also directed from the pathological side, M. Lancereaux, of Paris, maintaining that the lesions of locomotor ataxy do not present the characters of syphilitic sclerosis and syphilitic lesions in other organs; and his conclusion was that syphilis and ataxy were coincident, not correlated, believing the reason of the predominance shown by Prof. Erb to lie in the fact that ataxy occurred in individuals ad-

dicted to sexual excesses. Dr. Banks, of Dublin, thought there was a positive etiological connection between syphilis and tabes; and Dr. Zambuco, of Constantinople, and Prof. Rosenstein, of Leyden, also spoke on the matter. Sir W. Gull, in closing the debate, pointed out that the syphilitic poison produced indirect effects, inducing degeneration of tissues. The debate has not, therefore, led to any definite results; but taken in connection with the supposed curative effects of nerve-stretching in this same disease, it seems still to leave the question more open than Prof. Erb would wish us to believe. A paper by Prof. Ball and Dr. Thebierge, of Paris, was contributed to show the dependence of perforating ulcer of the foot upon locomotor ataxy, and in demonstrating its probable connection with trophical disturbance the authors were in harmony with the views of Mr. Savory and Mr. But in in their valuable contribution to the Royal Medical and Chirurgical Society, a year or two ago.

Dr. Brown Sèquard had undertaken to address the section on the subject of Localization of Disease in the Brain and Spinal Cord, from a pathognomonic and diagnostic point of view, and the abstract of his communication offered a very exhaustive field for his remarks. He contented himself, however, with giving an oral disquisition, his main contention being that groups of symptoms rather than isolated manifestations must be taken into account in the attempt to correctly localize disease in the brain or cord; and that the effects of a lesion in the centre were produced at a distance, and were irrespective of the direct paths of transmission of nervous impulses—which he illustrated by the fact that a puncture of the medulla will produce degeneration in the sciatic nerve, and a lesion of the sciatic nerve induce changes in the motor centres of the brain. He spoke of a dynamic influence as operating thus on parts at "a distance," and said that the anterior pyramids might be cut without paralysis ensuing, and then their cut ends (central or peripheral) when irritated produced movements on the same side as the lesion—*i.e.*, in parts where the pyramidal fibres do not go. M. Charcot, on the other hand, contended that the facts of clinical and pathological observation were indubitable, and could not be harmonized with the experimental evidence adduced by Dr. Brown-Sèquard, who, however, asserted that he believed that certain elements were endowed with distinct functions.

The subject of Addison's disease was opened in a paper by Dr. Greenhow, which comprised the relation of a recent case, and a general summary of known clinical and pathological facts concerning this remarkable affection. He pointed out that research must be especially directed to changes in the abdominal sympathetic and the pneumogastric nerve, a case recorded by Dr. Paget, of lymphadenoma, in which these structures were involved and the suprarenal capsules unaffected, where a deepening pigmentation of the skin was observed during life, giving support to this view. In the debate which ensued, Dr. Semmola, of Naples, said that at the Brussels Congress he had related a case diagnosed as Addison's disease, where improvement followed upon electrical treatment, but death occurred some months later, after an attack of acute dyspepsia. No opportunity was given, however, of confirming the diagnosis in this case, which Dr. Semmola had quoted in support of the view he held, that the suprarenal capsules need not necessarily be the seat of disease, and he exhibited a drawing showing morbid changes in the spinal cord and cœliac ganglia, which he held to be the essential lesion of "Addison's disease." A like position was maintained by Dr. Guéneau de Mussy, who had met with a certain number of cases of bronzed skin, without suprarenal disease, but with affection of the abdominal sympathetics, and he adduced in support of this the cutaneous pigmentation of pregnancy, and the occurrence of pigment moles on the forehead in cases of abdominal tuberculosis, a phenomenon to which he attaches so great significance as to regard it as almost pathognomonic. Dr. Zuelzer, of Berlin, spoke of the changes in the urine, and Dr. Gairdner, of Glasgow, of the association of leucoderma with Addison's disease, instancing a noteworthy case which had come under his notice. Sir W. Gull, remarking that he had seen Addison's earliest cases, did well to remind the members of the importance of the asthenia of Addison's disease, and of not laying too much stress upon the pigmentation. He believed the suprarenal capsules were nervous organs, in structure most resembling the pituitary body, so singularly cared for in its special fossa at the base of the skull, the function of which is just as much unknown. He expressed a doubt as to the prognosis being universally unfavorable, and thought that we should have to study those cases which do not die. Dr. Greenhow, in his reply, maintained that Addison's disease commenced in the suprarenal capsules, and that the association of leucoderma was a coincidence, but not a very rare one, with the cutaneous pigmentation.

Several communications were read upon the subject of Bright's disease. Dr. Rosenstein, of Leyden, in his paper, separated first of all such conditions of the kidney as are non-inflammatory as being independent affections; and he then discriminated between acute and chronic Bright's disease, anatomically and clinically. The acute form, characterized by emigration of colorless blood corpuscles, epithelial, and later, interstitial changes, passes very rarely into the chronic form. The chronic form is a diffuse inflammation of all the tissue elements of the kidney—represented by the "large white," the "variegated," "smooth contracted," and the "granular white" kidney; the red granular kidney starting from endarteric changes in the renal vessels, and to this form the senile contracted kidney is closely allied. Clinical observations can only recognize whether the organ is enlarged or contracted; and it is unable to distinguish between "parenchymatous" and "interstitial" forms. This is a clear statement of the results ensuing upon modern histological research; and had the paper been read in Section III, it would have attracted more attention. But, unfortunately, as above said, no discussion ensued in this section upon the subject. Dr. George Johnson contributed a clinical observation on the evidence of white blood-cell casts as indicative of glomerulo nephritis; and Dr. Grain-

ger Stewart read a paper upon the condition of the urine in Bright's disease, and the clinical value of its examination. Dr. Semmola, of Naples, argued that Bright's disease might be induced by alterations in the albumen of the blood. This paper was followed by a brief communication from Prof. Stokvis of Amsterdam, who related some experiments showing that the subcutaneous injection of albumen could produce glomerulo-nephritis, an experimental support of Dr. Semmola's view. Dr. Mahomed raised a very important subject, which he entitled "Chronic Bright's Disease without Albuminaria," including an analysis of cases of high arterial pressure producing the cardio-vascular changes characteristic of chronic Bright's disease, with red granular kidneys but without albuminuria; the number of cases being sixty-one, twenty-one of which were fatal. Dr. Mahomed stated that his views would appear at length in the forthcoming volume of Guy's Hospital Reports, but it would certainly have been well for the question to have been thoroughly debated in the section, bearing, as it does in so important a manner, upon clinical observation.

The subject of Gout was dealt with under two different aspects—viz., in a paper by Dr. Garrod, upon Eczema and Albuminuria in connection with Gout, and in one by Mr. Jonathan Hutchinson, on Rheumatism, Gout, and Rheumatic Gout. Dr. Garrod's observations included a very large number of cases of undoubted gout, having selected cases in which there had been, at one time or another, arthritic manifestations; and he conclusively proved the very great frequency with which eczema occurred in such subjects, and also renal disease, pointing out the characters of the renal affections. Mr. Hutchinson's paper embraced a wider field. He defined rheumatism as, in the main, a liability to joint disease, brought about by exposure to cold, and not through reflex nervous influences—a catarrhal arthritis; and gout as, in the main, a liability to joint disease, brought about by certain articles of food, by defects of assimilation and of excretions—a humoral arthritis He thus establishes a certain link between the two—viz., the liability to joint disease; but he was especially careful to point out that, in either, by hereditary transmission a "gouty" or "rheumatic" diathesis may be formed. In support of his view of an underlying arthritic tendency or condition, he referred to the remarkable frequency of "rheumatic gout," and of the association of deposits of lithate of soda in joints, with lesions of cartilage and bone, hitherto considered as typically rheumatic, and concluded his lucid exposition of the subject by referring to the existence of certain maladies which "are to be affiliated with gout and rheumatic gout, as certain forms of iritis, hemorrhagic retinitis, chronic rheumatoid arthritis, some forms of glaucoma, lumbago, sciatica, and neuralgia, nervi digitorum, and possibly hæmophilia." An interesting debate ensued, in which the speakers mostly aimed at showing that there was nothing in common between gout and rheumatism, but they must have missed the point of Mr. Hutchinson's thesis, for in his reply he claimed them as adherents to his cause. Thus Dr. Garrod thought that the great aim was to differentiate diseases and not to merge them into one another; that the gouty condition was perfectly distinct and separable from the rheumatic; that gout was almost unknown in Scotland, where rheumatic arthritis was common: that erosion of articular cartilages occurred as a consequence of uratic deposit in chronic gout; and that although the children of gouty parents suffered from rheumatic arthritis, it was not because there was an interchange of the diathesis, but simply because they were the offspring of debilitated parents. He also believed that gonorrhœal rheumatism had more analogies with pyæmia than with rheumatism. Dr. W. Roberts said that in Manchester cases of gout in hospital practice came mostly from London, which he attributed to the porter-drinking habits of the London poor; and Dr. Quinlan, of Dublin, said that since the people there had taken to drinking porter instead of whisky gout had become common, whereas previously it was almost unknown. Dr. Stokin, of Amsterdam, said that true gout was very rare in his city: he had seen only two cases, and those in debilitated women living in unhealthy conditions. Dr. Maclagan, of London, said that true gout was very rare in Scotland, but acute rheumatism and rheumatic arthritis were common—the latter especially in weakly girls and women. He believed rheumatism to be due to a miasm, and not to the influence of cold and wet, for those most liable to be influenced by cold and wet, the very young and the aged, did not suffer from rhematism. Dr. Grant, of Montreal, said that gout was hardly known in Canada, whereas rheumatism arising from insufficient protection against cold was common. Dr. Ord thought the arthritic changes were common in association with deposits of urate of soda in joints, and would use arthritis as a term common to both gout and rheumatism. In his view, gonorrhœal rheumatism was more allied to rheumatic urethritis than pyæmia; suppuration was not common in it, and similar articular affection accompanied arthritis, prostatitis, etc., not gonorrhœal. Dr. Duckworth pointed out that the uratic deposits signified gout, and that the hereditary gout occurred apart from dietetic errors. He considered the extensive arthritic changes sometimes seen in gouty joints were very rare, but admitted that sometimes a case appeared to present a coalescence of gout and rheumatism. There was often, however, great difficulty in getting a reliable history of gout. In his reply, Mr. Hutchinson not only showed that he granted the hereditary transmission of gout, and that lithates were deposited in the tissues in the disease, but that gout and rheumatism may mingle and often do mingle in the same subject. Indeed, so far as we understand Mr. Hutchinson's position it is simply this: that there is a tendency to arthritic disease which may partake of the characters of gout or of rheumatism, alone or conjointly, according to the influences to which the subject may be exposed, and that position was not strictly contested in the debate.

Professor Austin Flint's paper on the Analytical Study of Auscultation and Percussion, which he read on the last day of the session, was one of a very important character, aiming at the simplification of the terminology of physical pulmon-

ary signs, and basing the description of such signs upon the character of the sounds themselves, and independent of the mechanism by which they are produced. He was followed by Dr. Douglas Powell on the value of Bacelli's sign, "Pectoriloquie Aphonie," in the differential diagnosis of fluid effusion into the pleura. Dr. Bacelli maintained that in a case of pleuritic effusion, if the whispered voice be well conducted and pectoriloquous, the fluid may be certainly regarded as serous, but if ill-conducted or inaudible the fluid will be found to be purulent. Dr. Powell's own observations led him to the conclusion that the sign in question is not pathognomonic, although of considerable value in association with other signs. Sir. W. Gull said that Dr. Bacelli's sign is no new thing, and referred to Dr. Addison's observations upon the same sign in 1846; and his own (Sir W. Gull's) explanation of them on the physical ground of tenseness of the membrane and chest wall. Prof. Ewald, of Berlin, agreed with Dr. Powell, that Bacelli's sign is not reliable, but that the only certain means of diagnosis is by puncture. Prof. D'Espine, of Geneva, also spoke. Dr. Mahomed urged that the Congress should take action to draw up a single code of terms, but Dr. C. T. Williams pointed out that difficulty lay in the differences in the instruments employed, and Dr. Flint, in his reply, echoed Dr. Mahomed's wish that there should be established a general uniformity of terms. On the proposal of Sir W. Gull, a committee was formed, consisting of Prof. Ewald, Prof. D'Espine, Dr. Douglas Powell, Dr. Austin Flint and Dr. Mahomed, to report to the next Congress. Dr. C. T. Williams then read a paper on the Treatment of Phthisis at High Altitudes, drawing especial attention to the increased expansion of the chest following residence at these sites, and attributable to diminished barometric pressure. Dr. Norman Chevers pointed out the bad influence of hot climates on phthisis. Dr. H. Weber, of London, said that it was not a mere question of chest expansion, but of purity of air, which at high altitudes, such as Davos, does not promote fermentation. Similar effects were produced at Algiers, Madeira and other aseptic climates. When hereditary influence is strongly marked, cases in the first stage even advance at Davos and Colorado. But everywhere general medical supervision and management are essential. Dr. Wilson Fox said that phthisis was due to impure air, bad food, inheritance, and possibly septic causes. Nearly all high altitudes are curative, even in hot climates, as Bloemfontein. The finest shaped chests are liable to tubercular affection. He asked for information as to how long this cure lasts. If phthisis is to be cured by asepticism, then a six months' residence is sufficient; but if desirable to get changes in shape of chest, a longer time must be spent; and he appealed to those at Davos to keep their patients through the summer as well as winter. Dr. Alan Herbert, of Paris, urged physicians to establish the indications for sending patients to Davos, and also contra-indications—especially cardio-vascular disease.

Sir W. Gull, in closing the session, said he did so with great regret. There had been one uniform sentiment governing all—viz., a desire to work *pro bono publico*. He thanked the members for the courtesy shown to himself.

We must be contented to enumerate a few of the chief remaining subjects which were under discussion. Of these one of the most interesting was raised in a paper by Dr. Clifford Albutt, upon the treatment of a scrofulous neck. He contended for early surgical interference to remove the enlarged glands, and thus anticipate the evils of their suppuration or caseation, and the liability to constitutional infection thereby supervening. M. Jules Guérin recapitulated some views on the etiology of typhoid fever he had previously enunciated before the Paris Academy of Medicine, to prove that the disease originates from "fecal intoxication," but, as Sir W. Gull remarked, he did not sufficiently discriminate between the septicæmic effects and the conditions of the febrile process itself. Dr. W. Roberts drew attention to the presence of bacteria in the bladder (bacteruria), giving rise to fermentation of the urine and vesical irritation, a condition removable in a few days by 30-grain doses of salicylate of soda twice a day. Papers were read also by Prof. Eulenberg, of Greifswald, on Graphic Representations of Tendon Reflex; Dr. D'Espine, of Geneva, on Clinical Cardiography; Dr. Redard, of Paris, on Local Thermometry; Prof. Lépine, of Lyons, on Biliary Secretions in Morbid States: and Prof. Zuelzer, of Berlin, on the "Phosphor Acids of the Urine."

The absence—almost complete—of papers bearing upon the treatment of disease, has been the subject of some expressions of suprise in relation to the work of this section of medicine; and there may be some room for wonder at the contrast it presents in this respect to the section on surgery, where treatment formed so large a part of the subject matter. It must not, however, be inferred that medicine has no word to say upon the treatment of disease—there are many subjects that might be indicated that would have been usefully brought under discussion at an International Congress, subjects of great importance upon which opinions might have been sought; and while it is legitimate to regret that the opportunity for such an interchange of opinion was not seized, the omission must not be wholly laid at the door of the executive, for a special place had been retained in the programme for the "Treatment of Disease." Perhaps if the invitation had been made in less general terms, and some of the many open questions indicated, we should not have to record so barren a result.

(To be continued.)

The President's Removal.

Just as we are going to press the President has been removed to the seashore. He left the Executive Mansion shortly before six this morning (Sept. 6), and the train left the depot at 6.30. Just as the conveyance was leaving the White House the President waved his hand to the inmates of the Mansion who had gathered on the portico. The train arrived at Long Branch at 1.20 P.M. The President seemed to bear the journey well, but after his arrival he showed signs of fatigue. His pulse rose to 124 and his temperature to 101.6. At 10.30 P.M. he slept quietly.

EDITORIAL DEPARTMENT.

PERISCOPE.

Value of Alcohol in the Treatment of Diphtheria.

Dr. F. C. Roberts, of Fort Madison, Iowa, says, in a letter to *Gaillard's Medical Journal*, for July, 1881: While cauterizing a patient's throat the "victim" coughed, throwing the diphtheritic membrane all over my face. After a few days I fell ill with the disease and suffered severely.

I used the ordinary routine of treatment but became gradually weaker. The membrane in my throat nearly suffocated me. At last, becoming very weak, I sent for some whisky to use as a stimulant. A drink of it nearly suffocated me, and I strangled badly, and coughing hard, ejected a large quantity of membrane in an almost cooked condition. Immediate relief followed, and in a short time I again used the whisky, this time as a gargle, and the sensation of ease and comfort following induced me to use it frequently, and in a few days I was completely cured.

The second case was as follows: I was called in consultation with Dr. Hoffmeister; found the patient, a boy of fourteen years, suffering much the same as I had been, only much weaker and nearly black in the face from suffocation. Remembering my own experience, I advised the use of stimulants internally, and the following gargle:—

℞. Potassæ chloratis, ℥ ss
Alcohol.,
Aq. rosæ, āā ℥ ij. M.
Ft. gargle.
SIG. To be used every half hour.

Immediate improvement followed. Since that time I have used the alcohol very freely in diphtheritic cases, and always with the most favorable results.

Temporary Non-Assimilation.

Dr. W. C. Brittain, of Cochranton, Pa., writes as follows to the *Michigan Medical News*, August 10th, 1881:—

I was called to see Mr. J. A. Stewart on March 24th, 1881, and found him suffering with general debility, rather than from any special organic trouble. Upon inquiry I found that a short time before he had taken some doses of calomel, followed by quinia sulph., but without any relief.

I did not at that time make any positive diagnosis. I soon found at my subsequent visits that there was a want of assimilation, for although his appetite and digestion were good, and he relished his food, and the bowels were operated regularly, and his kidneys acted normally, there was a gradual and progressive waste of tissue. In four weeks from my first visit he was a living skeleton. Delirium set in, and at times it was furious. At this stage I asked for counsel, and Dr. T. M. Coley, of Brownsville, was called in, but still we could not locate any trouble, and assumed that there must be some obstruction of the absorbent ducts, for certainly digestion was not impaired. The patient gradually went down, until it did not seem possible that he could live but a few days. This wasting had been continued for over six weeks, and about the third day after our consultation I found him during my visit in the following condition: No pulse at the wrist, arms discolored as far as the elbows, and legs as far as the knees, and simply a faint action of the heart. It seemed to me that the scene would soon close, but the family was willing that the patient should die or get well in my hands, so I stuck to him and left an appointment for another visit. On my return I found the circulation improved somewhat, and from that time forward to the present there has been continued improvement in every respect, until he is now well.

I will now say that the temperature was at all times about normal, except at one time during his sickness, when he had marked intermittent conditions, which were controlled with quinia sulph.

I believe that there was for the time some obstruction of the ducts for conveying the chyle into circulation; or there may have been paralysis of the ducts, which after a time was overcome. At all events, I do not believe that the chyle reached the thoracic duct.

My treatment was sustaining all through. When I found the decline, I gave extract malt, and kept it up throughout. I gave him elixir ferri et strychnia, and during his worst condition, when it seemed he must die, I increased the strychnia, so that for a while he received one-sixteenth grain thrice daily. I also gave him regularly wine of beef. All these preparations together may have sustained him until assimilation was once more established.

Profuse Flooding at Seventh Week of Pregnancy, with Artificial Delivery of Ovum.

The following report by Dr. Eugene J. Cordell, of Baltimore, appears in the *Virginia Medical Monthly*, for August, 1881:—

The patient was a middle-aged multipara, to whom I was summoned at 5 A.M., on account of repeated hemorrhages caused by the use of pills (labeled "Job Moses" pills), taken for the purpose of producing an abortion. Her condition was a most alarming one. She must have lost an immense amount of blood, as the bed under her was saturated, and she was pale, completely relaxed, with pulse barely perceptible, and with frequent swoonings. The gravity of the case suggested immediate and radical interference. It was deemed unwise to subject the patient to a moment's delay, lest the recurring hemorrhage might prove immediately fatal in her exhausted and nearly moribund condition. The purpose already formed of removing the ovum from the uterus was strengthened by the complete relaxation, which gave promise of an easy introduction of the hand without anæsthetics, and by previous experience with the same patient a year before, on occasion of a miscarriage, when a retained placenta of about three months had to be peeled away from the fundus uteri. Accordingly, after

forty minims of the fluid extract of ergot (Squibb) had been injected under the skin of the arms, and some brandy taken internally, the hand was introduced, the vagina cleared of the clots which filled it, and the ovum scooped out of the thoroughly relaxed uterus with the fingers. The fingers were still kept in the uterus, which by means of the pressure exerted thus within the organ, and by the other hand over the abdomen, was under pretty thorough control. Small pieces of ice were at the same time pushed into the vagina, and thereon into the uterus. The internal hand was not removed for an hour or more, or until such an amount of uterine contraction was felt as removed all fear of further hemorrhage, at least for the time. The result was perfectly satisfactory. There was no further hemorrhage, and under the free use of iron and an abundance of nutritious food, the patient made a more rapid convalescence than was to be expected.

The Utility of Koumys in Consumption.

On this subject Dr. Clifford Dock, of this city, writes to the *Medical Bulletin*, for August, as follows:—

Some time since, at the suggestion of a medical friend, I placed a patient on koumys, not, I must confess, with very sanguine expectations of success, but more with the idea that a change of medicine, if not of benefit actually, might have some effect, through imagination.

The patient, an active business man of fifty, with tubercular phthisis, which had gradually developed from a slight nervous cough into well marked pulmonary trouble. At the time the koumys treatment was begun there was a well defined cavity in the apex of the left lung, with more or less percussion dullness over the remainder, harsh inspiratory murmurs in the right lung, great dyspnœa, fever, night sweats, and what the patient complained of most, a highly irritable stomach, even while on the plainest regimen; the presence of food in the stomach, no matter how small the quantity, produced immediate and lasting nausea.

Up to this time the various routine remedies had been used, with the usual amount of success, except that nothing seemed to alleviate the sick stomach in the least. I would say here, that the patient has been, more or less, the subject of chronic intermittent fever for the past twenty-five years, his business exposing him to it, and preventing proper curative treatment; this probably aggravated the sick stomach and rendered it less amenable to treatment. The koumys prepared by L. Wolff, of this city, was used, at the rate of a tumblerful three times a day, the last one being taken at bedtime. Although not relished at first, it soon became as agreeable to the taste as fresh milk, and was craved for its stimulating effects, counteracting, as it did, the great debility of like cases more effectually than any form of alcoholic stimulants.

Now, after two months' use, in the latter part of which it was not taken regularly, the results are most gratifying; the nausea has for some time been absent; all rational articles of food are eaten with impunity. The dyspnœa is entirely gone, except on vigorous exertion; the right lung is comparatively well; and the general health bids fair to carry the patient many years into the future.

Paraffin Splints.

Splints of solid paraffin are used by British surgeons. Mr. Glaister mentions its advantages: for instance, its lightness, and its readiness for use, besides the ease with which it can be recovered from old splints and utilized again. He says, however, that it is not a new invention. Dr. Macewen, of the Glasgow Royal Infirmary, has used it in hospital practice for some years; and in an article in the *Lancet* of August 31st, 1878, first drew the attention of the profession to paraffin splints. Mr. Glaister also published an article on the subject in the Glasgow *Medical Journal* for August, 1880. Dr. Macewen primarily advocated the use of gauze bandages, into the meshes of which the liquid paraffin was brushed; but later on he dipped the gauze bandages into the melted material till saturated, and applied when the heat could readily be borne; he then experimented with a variety of substances, as hay, straw, newspaper, oakum, flannel, cotton, and latterly cotton-wool, which last, in layers, he has found most suitable for the formation of splints, in combination with the paraffin. He now uses unbleached cotton-wool for splints in simple and compound fractures; in the treatment of the latter, cutting a window opposite the wound; and for Sayre's jackets. Mr. Glaister has frequently used paraffin splints in his own private practice; and during the winter of 1878–79, put up two or three Colles' fractures, with admirable results. He has also used them to produce immobility in joints. The following is the manner of making a splint of paraffin and cotton-wool; for, *e. g.*, a simple fracture of the bones of the leg. Unbleached cotton-wool, in the form of a layer, is cut to the requisite length, so as to fix both knee and ankle-joints, its breadth being sufficient to envelop the limb. The paraffin (having a melting-point of 130° F.) is sliced in sufficient quantity into a tin vessel, which is placed inside a larger one containing water not much below the boiling point. The cotton-wool is rolled into a form sufficiently small to enable it to pass into the paraffin vessel; having been put there, it quickly becomes saturated. One or two coatings are enough.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

Annual announcements have been received from the following medical schools:—

The Medical Department of the "University of Pennsylvania" for the one hundred and sixtieth annual session, 1881–82, which will open its preliminary course September 12th, and winter session October 3d, 1881, to close March 15th, 1882, after which the regular spring course opens, March 26th.

Fifty-seventh Annual Announcement of the "Jefferson Medical College," of Philadelphia,

the fall session to begin September 12th, and the regular winter term October 3d, 1881, and close at the end of the third week in March, 1882, to be followed by the spring session, to begin early in April and close early in June.

The "Medico-Chirurgical College," of Philadelphia, S. W. corner of Broad and Market streets, commences its winter session September 12th, 1881, and continues the same for six months.

The Medical Department of the "University of the City of New York." The preliminary term will commence September 21st, and continue until the opening of the regular winter session, October 5th, 1881, the latter to continue until March, 1882, after which the spring session begins and lasts till June 1st.

The Department of Medicine and Surgery of the "University of Michigan" for 1881–82. The College year begins October 1st, and ends in the last week of June.

"Rush Medical College," Chicago, thirty-ninth Annual Announcement. The session opens September 27th, 1881, and will continue twenty one weeks.

"Medical College of the State of South Carolina." The fifty-third course of lectures in this institution will begin on the 15th of October, 1881, and end early in March, 1882.

Fortieth Annual Announcement of the "St. Louis Medical College," in which the regular course of lectures will commence September 26th, and continue until March 4th 1882.

Third Annual Announcement of the "College of Physicians and Surgeons" of Saint Joseph, Mo. The regular winter session will begin Oct. 3d, 1881, and close the first week in March, 1882.

Sixty first Annual Catalogue and Announcement of the "Medical College of Ohio." The preliminary term will begin September 5th, and the regular winter session October 3d, 1881, and continue until March, 1882, to be followed by a spring term of two months' duration.

Sixth Annual Announcement of the "Meharry Medical Department of Central Tennessee College." The regular session will commence October 4th, 1881, and end March 1st, 1882. This institution is designed especially for the education of colored physicians.

Nineteenth Annual Announcement of the "Philadelphia Dental College and the Hospital of Oral Surgery." Regular winter course from October 1st, 1881, till the end of February, 1882.

"The American Veterinary College," the Veterinary Department of the University of the State of New York, in which the regular course commences October 3d, 1881.

BOOK NOTICES.

The Practice of Medicine and Surgery, applied to the Diseases and Accidents incident to Women. By W. H. Byford, A.M., M.D., Professor of Gynæcology in Rush Medical College, and of Obstetrics in the Woman's Medical College, etc., etc. Third Edition. Thoroughly revised and rewritten. With one hundred and sixty-four Illustrations. Philadelphia: Lindsay & Blakiston, 1881. 8vo, pp. 682. Price: Cloth, $5.00; Leather, $6.00.

Notwithstanding the numerous recent treatises on Gynæcology, we feel certain that all who are acquainted with the teachings and writings of Prof. Byford will welcome this third and considerably enlarged edition of his pre-eminently practical work, that has now been out of print for several years, during which period rapid advances have been made in the treatment of diseases peculiar to women. Much that is contained in this edition is entirely new matter, and such modifications of previous teachings have been introduced as the additional experience of the author has induced him to make. One of the most noteworthy of recent improvements in gynæcology is the almost universal introduction of Listerism in operative procedures, and of this the author is a warm advocate. Before adopting the antiseptic method, his ovariotomy cases yielded only sixty-six per cent. of recoveries, but since he commenced the use of the antiseptic spray and dressing, his successes have been about eighty-six per cent. He, however, thinks that his cases (eighty-two in all, of which twenty-two were performed with and sixty without antiseptic precautions), are too few to base any final conclusions upon; nor does he feel able to say to what extent the more favorable results with antiseptic measures may be due to other improved circumstances and to increased skill acquired from experience in operating. What renders Prof. Byford's work especially valuable, is, that he records his blunders, which, we believe, will often prove of greater benefit to the less experienced practitioner than his well-conducted cases. Thus, on page 630 he relates how, in a case of ovarian tumor complicated by pregnancy, which was not suspected, he plunged the trocar into the gravid uterus containing a seven months' fœtus. A vaginal examination had in this case been omitted, on account of the extreme modesty of the patient, a supposed virgin. With the exception of the death of the child, all went well; but surely this will be a warning lesson to others.

THE

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D. G. BRINTON, M.D., EDITOR.

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THE ADDRESSES AT THE INTERNATIONAL MEDICAL CONGRESS

The addresses before the general sessions and the sections of the International Medical Congress, delivered as they were by the most eminent members of our profession, may be regarded as indicating the high-water mark which medicine has reached at the present time. They represent the views and opinions which are most in favor with the progressive schools of thought in our profession.

On account of their number and length we cannot pretend to give them in full, but we shall present them in abstract and extract, so that our readers may learn the gist of their contents with the least expenditure of time and labor.

The Inaugural Address of the President, Sir JAMES PAGET, was chiefly devoted to setting forth the advantages to be derived from such an assembly as that which he presided over. He referred to the advantages of personal interchange of views, in conversation as well as in formal discussion, and to the profit which an earnest worker in science will derive from contact with very diverse minds and contrary opinions. He went on to say:—

But that which I would chiefly note, in relation to the great variety of minds which are here, is that it is characteristic of that mental pliancy and readiness for variation which is essential to all scientific progress, and which a great International Congress may illustrate and promote. In all the subjects for discussion we look for the attainment of some novelty and change in knowledge or belief; and after every such change there must ensue a change in some of the conditions of thinking and of working. Now, for all these changes, minds need to be pliant and quick to adjust themselves. For all progressive science there must be minds that are young, whatever may be their age.

Just as the discovery of auscultation brought to us the necessity for a refined cultivation of the sense of hearing, which was before of only the same use in medicine as in the common business of life; or, as the employment of the numerical method in estimating the value of facts required that minds should be able to record and think in ways previously unused; or, as the acceptance of the doctrine of evolution has changed the course of thinking in whole departments of science; so is it, in less measure, in every less advance of knowledge. All such advances change the circumstances of the mental life, and minds that cannot or will not adjust themselves, become less useful, or must, at least. modify their manner of utility. They may continue to be the best defenders of what is true; they may strengthen and expand the truth, and may apply it in practice with all the advantages of experience; they may thus secure the possessions of science and use them well, but they will not increase them.

It is with minds as with living bodies. One of their chief powers is in their self adjustment to the varying conditions in which they have to live. Generally, those species are the strongest and most abiding that can thrive in the widest range of climate and of food. And, of all the races of men, they are the mightiest and most noble who are, or by self adjustment can become, most fit for all the new conditions of existence in which by various changes they may be placed. These are they who prosper in great changes of their social state; who, in successive generations, grow stronger by the production of a population so various that some are fitted to each of all the conditions of material and mode of life which they can discover or invent. These are most prosperous in the highest civilization; these whom nature adapts to the products of their own arts.

Or, among other groups, the mightiest are those who are strong alike on land and sea; who can explore and colonize, and in every climate can replenish the earth and subdue it: and this not by tenacity or mere robustness, but rather by pliancy and the production of varieties fit to abide and increase in all the various conditions of the world around.

Now, it is by no distant analogy that we trace the

likeness between these in their successful contests with the material conditions of life and those who are to succeed in the intellectual strife with the difficulties of science and of art. There must be minds which in variety may match with all the varieties of the subject matters, and minds which, at once or in swift succession, can be adjusted to all the increasing and changing modes of thought and work.

Such are the minds we need; or rather, such are the minds we have; and these in great meetings prove and augment their worth. Happily, the natural increase in the variety of minds in all cultivated races is—whether as cause or as consequence—nearly proportionate to the increasing variety of knowledge. And it has become proverbial, and is nearly true in science and art, as it is in commerce and in national life, that whatever work is to be done, men are found or soon produced who are exactly fit to do it.

Referring to the work in the Sections, he was led to speak of specialism:—

In truth, the fault of specialism is not in narrowness, but in the shallowness and the belief in self-sufficiency with which it is apt to be associated. If the field of any specialty in science be narrow, it can be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, may reach the richest stores of wealth, and find use for all the appliances of scientific art. Not in medicine alone, but in every department of knowledge, some of the grandest results of research and of learning, broad and deep, are to be found in monographs on subjects that, to the common mind, seemed small and trivial.

And study in a Congress such as this may be a useful remedy for self-sufficiency. Here every group may find a rare occasion, not only for an opportune assertion of the supreme excellence of its own range and mode of study, but for the observation of the work of every other.

The speaker defended eloquently the pursuit of remote and apparently minor researches in science, and showed how, in various instances, they alone made possible the most valuable practical discoveries and applications of scientific truth. He then referred to the true mission of the Congress:—

It may be said, if our Congress be representative, as it surely is, may we not legislate? May we not declare some general doctrines which may be used as tests and as guides for future study? We had better not.

The best work of our International Congress is in the clearing and strengthening of the knowledge of realities; in bringing, year after year, all its force of numbers and varieties of minds to press forward the demonstration and diffusion of truth as nearly to completion as may from year to year be possible. Thus, chiefly, our Congress may maintain and invigorate the life of our science. And the progress of science must be as that of life. It sounds well to speak of the temple of science, and of building and crowning the edifice. But the body of science is not as any dead thing of human work, however beautiful; it is as something living, capable of development and a better growth in every part. For as in all life the attainment of the highest condition is only possible through the timely passing-by of the less good, that it may be replaced by the better, so is it in science. As time passes, that which seemed true and was very good, becomes relatively imperfect truth, and the truth more nearly perfect takes its place.

He closed with a reference to the certainty of steady and continued progress in science, and to the nobility of the calling of the practitioner of medicine.

The address at the second general meeting was delivered by the celebrated Professor Rudolph Virchow, of Berlin. It was devoted almost entirely to the defence of vivisection, and to an exposition of the benefits it has conferred upon science and mankind. He began with the following words:—

At the last International Medical Congress, holden in Amsterdam, when reporting on the subject of medical education, I discussed the question as to how far the experimental method of teaching was necessary; and I arrived at the conclusion that it must be applied in its widest sense, and in particular that vivisection was an indispensable means to that end. In a still higher degree, however, I had to admit the importance of this subject in research, and in opposition to those who, with ever-increasing vehemence, attack experimenting investigators on account of the nature of their investigations and of the means they employ. I was able, with the fullest concurrence of a numerous meeting, without one single dissentient voice, to say: "All those who attack vivisection as a means of science do not possess the least idea of the importance of science, and they are still more ignorant of the importance of this aid to its attainment."

In the two years which have since gone by, the agitation of the opponents (of vivisection) has grown in extent, as well as in its object. One country after the other has been drawn into their net, and international communications have been opened in order to secure greater results by means of united efforts. They are no longer satisfied with the results which legislation in England in 1876 gave them. Now, the demands have increased: a petition of the new Leipzig Animals Protection Society of March 8th, last, demands from the German Parliament the passing of a law by means of which "the torturing of animals under the plea of scientific research shall be punishable with imprisonment of not less than four weeks to two years, together with deprivation of civil rights." True, all do not go so far as this. Some ask not for complete suppression all at once, but for more or less lim-

itation of vivisection. They do not, however, make any secret that this is provisional, and they demand that even the official laboratories of the universities shall be placed under the control of a member of the Animals Protection Society.

He observed that similar attacks had been made in previous centuries against the pursuit of human anatomy, the desecration of the bodies of the dead, etc. He pointed out that the true science of Medicine is based on Anatomy and Physiology, as was taught in the third century B.C., by Erasistratus and his followers in Alexandria, but was not generally recognized until about the beginning of this century. He paused to emphasize this all important change, asking:—

How, then, has it come to pass that symptomatology, which little more than a generation since held so high a position, has so entirely lost consideration that at most universities it is no longer taught as a specialty? Have signs no longer a signification for the practitioner? Can he establish his diagnosis without a knowledge of the symptoms? Certainly not. But, for the scientific physician, symptoms have ceased to be the expression of a concealed power which is recognizable only in its outer workings. He searches for this power itself, and endeavors to find its seat, in the hope of therein fathoming its nature. Therefore, the first question of the pathologist, as of the biologist, in general is, "Where?" That is the anatomical question; and whether we seek to discover the seat of the disease or of life with the knife of the anatomist, or merely by the eye or the hand, whether we therefore dissect or only observe, the method of procedure is always anatomical. Thoroughly logical, then, was the title of "De Sedibus Morborum," given by the founder of pathological anatomy to his fundamental book, which originated a movement that in a few decades changed the whole face of the science.

This change has been accomplished most completely with respect to diseases of the eye. Who can avoid the conviction that the ophthalmology of the present day scarcely bears any resemblance to that of the last century? Who would rest satisfied with the symptoms of amaurosis? Who despairs of recognizing the nature of glaucoma? Every oculist has at hand the means of studying the disease itself, and not merely its signs. Even anti vivisectors acknowledge that ophthalmology is a fertile form of study; but they forget that every organ is not so favorably placed and constructed for observation as is the globe of the eye. Since the wonderful discovery of the ophthalmoscope, anatomical analysis can be carried, without the aid of the knife, so far into the constituent parts of the eye that we are enabled to examine the smallest textural portions of its fundus—nay, single cells or groups of cells—just as easily as in an artificial preparation of an eye that has been excised. But we should not forget what prolonged prior anatomical and physiological study was required for the interpretation of that which is now so conveniently seen. The structure, disposition, and function of each separate part had first to be laboriously made out, before it became possible to ascertain by a mere glance at the altered tissue what had really taken place; and no student will be able truly to understand the nature of the changes, who has not previously made himself thoroughly acquainted with the anatomy and physiology, and the possible pathological alterations, of each constituent part of the eye.

* * * * * * * * * * *

With this we have arrived at the point which indicates, as it were, the boundary between the Old and New Medicine. *The principle of modern medicine is localization.* To those who are always asking, What good has modern science done to practical medicine? we may simply reply that every branch of medical practice has adapted itself to the principle of localization—not merely in pathology, but also in therapeutics—and that to the great benefit of the sick. It would be quite superfluous to seek for special examples of the utility of this new knowledge. Such examples abound, but we do not need them, as we can refer to the general characteristics of modern medicine. All those subjects which already, in earlier times, had a natural inclination to localization, as surgery and dermatology, have, quite logically, continued to advance in the same sense. But those branches which had preserved from the old humoral pathology a tendency to set forth general formulæ, have gradually abandoned the tradition that had become so dear to them; and it has become admitted more and more that, in truth, generalization is nothing else than a *multiplication of foci*, and that the cure of a so-called general disease signifies the extinction of each separate centre. This is indeed a reform from head to foot, and he who has not grasped it cannot say that he has followed the advance of science with effect.

From this discussion of the relationship of disease he passed to an examination as to what *life* is, for, as he observed, "disease presupposes life." This, he maintained, could only be learned from the living, not from the dead; and that we had made grand and significant progress in understanding this wonderful problem, through experiments on living animals, he demonstrated by numerous references. What this progress is, he summed up in a few words:—

I will only prominently mention in a few words that one idea, the origin of which stretches far backward, has always come out more clear and more victorious; and that is the idea of a *life proper to the individual parts*—the *vita propria*. Every new form of experiment that is contrived renders new parts accessible to the investigations of natural science, and with every step we become more clearly convinced that the great life-unity, in the usual sense, is a mere fiction arising from the observation that in the hierarchical organization of the human body certain organs

attain so high a development, and thereby so great an importance, that they have full right to the name of *vital organs;* and as among these organs the medulla oblongata possesses the highest importance, it may be easily understood how the idea has arisen that this may be the precise seat of life. But we now know that life is a collective action of all parts—the higher or vital, as well as the lower or less worthy; and that there is no *single* seat of life, but that every true elementary part, and especially every cell, is a seat of life. In biological as well as pathological research, also, we have arrived at a multiplication of foci: but it is obvious that the number of vital centres is much larger than that of disease centres ever can be; and therefore disease and life—or, to speak more precisely, diseased and healthy life—may very well co-exist in the same organism; invariably, however, in such a manner that disease always signifies an abridgment, a *minus* of healthy life. In this investigation we have again come upon the essence of disease that had so long disappeared; but truly not in its spiritual form, but as an entirely material *ens*, a real, corporeal thing—the *altered cell.*

After showing the practical utility of these researches, he touched on their moral and legal aspects, showing that any kind of training involves pain; that the law gives power to owners of animals to kill them, etc. As to the alleged hardening effects on experimenters themselves, he closed with a denial of it, in these words:—

The proof that moral earnestness has undergone diminution among the medical body of the present day is nowhere forthcoming; and the statement that Christianity is endangered by Christianity, is worthy of Abdera. The allegation that the medical student has become inwardly "brutalized" by dissection and vivisection is as unfounded as is the calumny that the morality of his teachers has sustained injury. But there is no ground for any fear for science itself. What Bacon said of the sun may be said of it: "Palatia et cloacas ingreditur, neque tamen polluitur."

The general address delivered by Professor Huxley was upon the connection of the Biological Sciences with Medicine. In previous ages no such connection was imagined: now it is close and recognized on all hands:—

Taken in its broad sense, "medicine" not merely denotes a kind of knowledge, but it comprehends the various applications of that knowledge to the alleviation of the sufferings, the repair of the injuries, and the conservation of the health of living beings. In fact, the practical aspect of medicine so far dominates over every other that the "healing art" is one of its most widely received synonyms. It is so difficult to think of medicine otherwise than as something which is necessarily connected with curative treatment, that we are apt to forget that there must be, and is, such a thing as a pure science of medicine—a "pathology" which has no more necessary subservience to practical ends than has zoölogy or botany.

The logical connection between this purely scientific doctrine of disease, or pathology, and ordinary biology is easily traced. Living matter is characterized by its innate tendency to exhibit a definite series of the morphological and physiological phenomena which constitute organization and life. Given a certain range of conditions, and these phenomena remain the same, within narrow limits, for each kind of living thing. They furnish the normal and typical characters of the species; and as such, they are the subject-matter of ordinary biology. * * * * *

Thanks to the intimate alliance of morphology with medicine, the natural history of disease has, at the present day, attained a high degree of perfection. Accurate regional anatomy has rendered practicable the exploration of the most hidden parts of the organism, and the determination during life of morbid changes in them; anatomical and histological post-mortem investigations have supplied physicians with a clear basis upon which to rest the classification of diseases, and with unerring tests of the accuracy or inaccuracy of their diagnoses.

If men could be satisfied with pure knowledge, the extreme precision with which, in these days, a sufferer may be told what is happening and what is likely to happen, even in the most recondite parts of his bodily frame, should be as satisfactory to the patient as it is to the scientific pathologist who gives him the information. But I am afraid it is not; and even the practicing physician, while nowise underestimating the regulative value of accurate diagnosis, must often lament that so much of his knowledge rather prevents him from doing wrong than helps him to do right. * * * * * * * * *

The essence of modern, as contrasted with ancient, physiological science, appears to me to lie in its antagonism to animistic hypotheses and animistic phraseology. It offers physical explanations of vital phenomena, or frankly confesses that it has none to offer. And, so far as I know, the first person who gave expression to this modern view of physiology, who was bold enough to enunciate the proposition that vital phenomena, like all the other phenomena of the physical world, are, in ultimate analysis, resolvable into matter and motion, was Réné Descartes.

The fifty-four years of life of this most original and powerful thinker are widely overlapped on both sides by the eighty of Harvey, who survived his younger contemporary by seven years, and takes pleasure in acknowledging the French philosopher's appreciation of his great discovery.

The speaker then proceeded to review briefly the progress of physiology from the time of Descartes, especially with reference to the explanations given of the phenomena of life. The theories of Borelli, Harvey, Haller, Bœrhaave, Hunter and Bichat were adverted to. All these lead up, by gradual steps, to what the speaker considered the modern and true theory, which he expressed in the following words:—

The proposition of Descartes, that the body of a living man is a machine, the actions of which are explicable by the known laws of matter and motion, is unquestionably largely true. But it is also true, that the living body is a synthesis of innumerable physiological elements, each of which may nearly be described in Wolff's words, as a fluid possessed of a "vis essentialis, and a "solidescibilitas;" or, in modern phrase, as protoplasm susceptible of structural metamorphosis and functional metabolism; and that the only machinery, in the precise sense in which the Cartesian School understood mechanism, is that which coördinates and regulates these physiological units into an organic whole.

In fact, the body is a machine of the nature of an army, not of that of a watch, or of a hydraulic apparatus. Of this army, each cell is a soldier, an organ, a brigade, the central nervous system headquarters and field-telegraph, the alimentary and circulatory system the commissariat. Losses are made good by recruits born in camp, and the life of the individual is a campaign, conducted successfully for a number of years, but with certain defeat in the long run.

The efficacy of an army, at any given moment, depends on the health of the individual soldier, and on the perfection of the machinery by which he is led and brought into action at the proper time; and therefore, if the analogy holds good, there can be only two kinds of diseases, the one dependent on abnormal states of the physiological units, the other on perturbation of the coördinating and alimentative machinery.

Hence, the establishment of the cell theory, in normal biology, was swiftly followed by a "cellular pathology," as its logical counterpart. I need not remind you how great an instrument of investigation this doctrine has proved in the hands of the man of genius to whom its development is due, and who would probably be the last to forget that abnormal conditions of the coördinative and distributive machinery of the body are no less important factors of disease.

Henceforward, as it appears to me, the connection of medicine with the biological sciences is clearly defined. Pure pathology is that branch of biology which defines the particular perturbation of cell life, or of the coördinating machinery, or of both, on which the phenomena of disease depend.

Those who are conversant with the present state of biology will hardly hesitate to admit that the conception of the life of one of the higher animals as the summation of the lives of a cell aggregate brought into harmonious action by a coördinative machinery formed by some of these cells, constitutes a permanent acquisition of physiological science. But the last form of the battle between the animistic and the physical views of life is seen in the contention whether the physical analysis of vital phenomena can be carried beyond this point or not. * * * *

If there is any truth in the received doctrines of physics, that contrast between living and inert matter on which Bichat lays so much stress, does not exist. In nature, nothing is at rest, nothing is amorphous; the simplest particle of that which men in their blindness are pleased to call "brute matter" is a vast aggregate of molecular mechanisms, performing complicated movements of immense rapidity, and sensitively adjusting themselves to every change in the surrounding world. Living matter differs from other matter in degree and not in kind; the microcosm repeats the macrocosm; and one chain of causation connects the nebulous original of suns and planetary systems with the protoplasmic foundation of life and organization.

From this point of view pathology is the analogue of the theory of perturbations in astronomy; and therapeutics resolves itself into the discovery of the means by which a system of forces competent to eliminate any given perturbation may be introduced into the economy. And, as pathology bases itself upon normal physiology, so therapeutics rests upon pharmacology, which is, strictly speaking, a part of the great biological topic of the influence of conditions on the living organism, and has no scientific foundation apart from physiology.

It appears to me that there is no more hopeful indication of the progress of medicine towards the ideal of Descartes than is to be derived from a comparison of the state of pharmacology at the present day with that which existed forty years ago. If we consider the knowledge positively acquired in this short time, of the *modus operandi* of urari, of atropia, of physostigmin, of veratria, of casca, of strychnia, of bromide of potassium, of phosphorus, there can surely be no ground for doubting that, sooner or later, the pharmacologist will supply the physician with the means of effecting, in any desired sense, the functions of any physiological element of the body. It will, in short, become possible to introduce into the economy a molecular mechanism, which, like a very cunningly contrived torpedo, shall find its way to some particular group of living elements and cause an explosion among them, leaving the rest untouched.

With these hopeful words the speaker concluded.

It will be seen that in these addresses some of the most profound questions which can engage the human mind were answered by the masters of modern science, in accordance with its latest and most thoroughly tested utterances. How different the answers may be which shall be given a hundred years from now none can guess, but perhaps it is not unwise for us to remember that a century ago men believed, as firmly as we do now, that theirs was an enlightened age, and their processes were the right ones to find out truth. Dogmatism is quite as liable to flourish in the arena of science as in the schools of theology, and even our most applauded theories must be accepted as provisional only, and not the last words of intelligent thought.

Notes and Comments.

A New Method of Treatment of Diseases of the Middle Ear With Impervious Eustachian Tube.

Dr. A. Wellington Adams, of Denver, Colorado, gives, in the *Rocky Mountain Medical Review*, for July, 1881, the history of several cases of deafness due to diseases of the middle ear, which were successfully treated by the application of medicated fluids and vapors to the tympanum through the external auditory canal. This is accomplished by dissecting out two triangular segments of the membrana tympani; one in the superior and the other in the inferior portion of the membrane. Sometimes the entire membrane is excised; with the exception of the *auriculus tympanicus*. In this way he is enabled to reach the middle ear directly, accurately determine the condition of its lining membrane, diagnose the presence or absence of foreign substances or growths within the tympanum, ascertain positively the pathological changes in the membrana tympani, and to apply his treatment directly and advantageously to the diseased parts. During the treatment, the openings are retained by means of pledgets of absorbent cotton introduced therein; and the entrance of air and dust is prevented by cotton worn in the external auditory canal. After accomplishing his purpose, the membrane readily reproduces itself, and the openings are closed without any interference. For the purpose of opening an Eustachian tube impervious to air he uses a moderately stiff filiform bougie passed through a metallic tube with a short curve at the extremity, which is to be introduced into the middle ear.

Inutility and Dangers of Medical Treatment of Epithelioma of the Tongue.

Scattered throughout the Bulletins de la Société de Chirurgie, for the year 1879, are found the reports of a discussion which fully brought out the opinion of M. Verneuil, perhaps the most eminent surgeon of the present French faculty, regarding the folly of temporizing with cancer of the tongue.

The conclusions he formulated are the following: 1st. Topical treatment cannot cure true lingual cancroid. Mercury has no action except on syphilitic symptoms which were formerly difficult of recognition, but which, through the works of Fournier, have become of facile diagnosis. Iodide of potash has no real efficiency against true neoplasm; its use should be restricted to syphilitic and scrofulous lesions. Finally, chlorate of potash sometimes cures ulcerations and adenomata of the sudoriparous glands, (ulcerations et adenomes sudoripares) but otherwise merits no confidence.

2d. All these medicaments, as also the milder caustics, often so deplorably insisted on, are not only inefficacious, but even productive of injury. But there is no medicament which precipitates the onward march of cancer like mercury, which again, like iodide of potash, often induces grave perturbations in the digestive functions.

3d. At the début there is always a moment when the malady is sufficiently characterized and its nature demonstrated, while it is yet so circumscribed that ablation may be performed without fear of complications.

4th. But why operate, say many, when relapse (recidive) will surely occur? When ablation is done before the period of propagation and cancerous cachexia there is always hope of definite cure.

M. Verneuil cites four of his patients who were completely cured. The epithelioma was but about the length of the nail, and had little depth in three of the cases. The fourth patient had been operated on previously, and there was one ganglion affected; nevertheless, after the operation, the morbid tissue was not reproduced.

Laceration of the Female Urethra, Following Dilatation, Cured After Fourteen Operations.

Dr. Andrew F. Currier, assistant house surgeon for the Woman's Hospital of the State of New York, reports, in the New York *Medical Journal and Obstetrical Review*, for August, 1881, a remarkable case, illustrating how patience and perseverance are sometimes rewarded. The patient was a young lady who, during a period of five years, had no less than fourteen operations performed on the urethra and bladder. After repeated failures and unparalleled suffering, the case finally terminated in perfect recovery. Dr. Emmet, under whose care the patient was, had several times laid open the entire urethra, and before the final operation both this canal and the bladder were laid open their entire length, and the excess of mucous membrane in the vagina and bladder was cut away, when a transverse fissure was formed in the anterior wall of the urethra, near the neck. The edges of this were pared and brought together by a suture.

The urethra and a portion of the bladder were then closed by a series of ten interrupted sutures, passed quite to the meatus, from a point two inches posterior to it. These were secured in position with perforated shot. Before they were removed, the urine was drawn at regular inter-

vals, the catheter being introduced behind the sutures, through the fistula.

When, on the fourteenth day, the sutures were removed, the patient was found to have regained complete control over the bladder, and had improved in every other way, so that there are strong reasons to hope that a permanent result has been reached.

An Anæsthetic Car.

A correspondent writes to an English contemporary:—

When I was in Paris I had an opportunity of seeing Paul Bert's anæsthetic car at work. I was at the St. Louis Hospital one morning; the car was there, and some operations were to be done on it. We—the patient, doctor, and his students—went into the car; the door, air-tight, was closed, and air forced into the car; in a few minutes my ears began to feel strange, and I was told to swallow, yawn, and blow my nose, which I did every few minutes, and so made the pressure equal on both sides of the drums of my ears. The patient laid himself down on the operating table, and the anæsthetic agent was given him. He took it very quietly, did not struggle, and was soon insensible. While he was unconscious, an epithelioma was removed from his lower lip; after the wound was sewn up, the compressed air was allowed to escape; the patient got up from the table, walked out of the car, and lay down on the grass; he complained of no headache nor nausea, but said he felt just as usual. The car is on wheels, and is carried about from hospital to hospital; the hospitals being under government, the car is a public one, and is taken all over Paris.

A New Hybrid.

Dr. W. Gray Smith, of Baltimore, tells, in the *Maryland Medical Journal*, of a male rabbit and female cat that exhibited a great liking for each other, were constantly together, and were seen frequently in the act of sexual intercourse. The cat in due time gave birth to two kittens, one of which was perfectly natural in appearance; the other presented some remarkable peculiarities: The tail is short (a rabbit-tail in appearance), being about one inch long, and curved up on the back, the bones comprising it being anchylosed. The relative length of the hind and fore legs corresponds with that of the rabbit, the former being the longest, so that when in motion the head is on a lower level than the posterior extremity. In moving, it leaps like a rabbit. Its head and ears are those of a cat. Its hair is softer than that of an ordinary kitten, being more like that of the rabbit. The markings of color of the hair are exactly like those of the old rabbit. It began early to show a liking for grass and cabbage leaves, and continues to eat them; it was taught to eat meat with difficulty. Its teeth and toe nails are decidedly those of a carnivorous animal. It is now about three months old. For the first two months it was thrown a great deal with rabbits, whose society it seemed to prefer to that of cats.

The editor of the above journal asks whether this is a coincidence, a case of mere maternal impression, or one of crossed species?

There are certainly strong reasons for the latter supposition.

Peptones.

The use of peptones (digested food), in many cases of debility of the digestive organs, is increasing. The usual method of preparation is to digest a kilogram of lean beef, deprived of fatty and fibrous matter, and finely minced, for twelve hours, at a temperature of 50° C. in 10 litres of water, acidified with hydrochloric acid (4 grams HCl per litre), with frequent agitation, adding about 10 grams of pepsina porci, more or less, according to its activity. After the digestion the liquid is filtered, and should yield no precipitate to nitric acid. It is then exactly saturated by bicarbonate of soda, and either evaporated to dryness or to a syrupy consistence. The 1 kilogram of beef should yield about 250 grams of dry peptone, or the fluid should contain about fifty per cent. of peptone. Peptones thus prepared always contain a considerable proportion of chloride of sodium, and thus, if taken in wine, syrups, or elixirs, impart a disagreeable salt taste, which can, however, be eliminated by careful treatment.

Special Reports.

NO. XVI.—MIDWIFERY.

(*Continued from p. 275*)

Electricity in Labor.

In the *Annales de Gynecologie*, Mai, 1881, Dr. G. Apostoli relates the use he makes of electricity in labor. During the last two years he has used electricity in all his cases, in the following way: Immediately after the delivery, an induced current is applied to the uterus, and gradually increased in intensity. This operation is repeated from eight to ten times, during about six days after normal labor. When the labor has been premature, or abortion has occurred, the

current is applied from fifteen to twenty times. The object is to aid and complete the involution of the uterus, and to ward off all the complications which result from arrested or retarded involution.

Management of the Third Stage of Labor.

In the Strasburg Hospital, according to Dr. KABIERSKE (*Centbl. f. Gynäk.*, No. 7, 1881), the Credé method is not employed, and he quotes from Credé and Spiegelberg as follows: "The natural powers in a normal labor are sufficient for the terminating of the birth, and they accomplish the separation of the placenta more efficiently alone than when aided." He states "that the expectant treatment of the third stage in normal cases is without danger," and instances cases where the placenta was not expelled for as long as fifteen days post-partum, and where no bad results ensued. He claims that after expectant treatment the puerperium is far better than after any other, both as regards temperature and the rapid disappearance of blood in the lochia. As soon as the head is born, care is taken not to handle the uterus in any way, and in eighty per cent. of his cases the after-birth came away in less than three hours, while the longest period noticed was twelve hours. When the membranes were adherent the patient's pelvis was raised, and the weight of the placenta, which was only partially supported, was allowed to complete the process, which it did, at the latest, within half an hour. The writer reserves certain cases as requiring interference either by the Credé method or by manual extraction, just as in the other stages of labor, interference is necessary.

Care After Delivery.

Much of the comfort and not a little of the future physical welfare of the woman depends upon the little attentions given to her immediately after delivery. Dr. D. M. WILLIAMS, who not long since furnished the statistics of 2500 cases of midwifery out of his own practice to the *British Medical Journal*, says, on this point:—

"When a student, I never saw the binder used before delivery; but it is a most excellent help, supporting the back and increasing the power of the pains. The placenta I always remove quickly, usually by pressure, but if need be, by the introduction of the hand. On one occasion, the patient, a fat, healthy woman aged 42, expelled the whole contents of the uterus unbroken, a few minutes after I entered the room. I was startled for a moment at the unusual sight, but quickly tore the membranes; the child cried lustily, and the woman did well.

"When the labor is over, I invariably make my patients comfortable, removing everything wet, even to the chemise and night-dress, if required, applying the binder myself next the skin. In doing this, I bring my hand sideways into the abdomen, so that I can embrace the fundus, then fill the furrow thus made with napkins, not putting them upon the uterus, with reference to the horizontal position; but above, with reference to the vertical position; then a firm binder tightly applied and well pinned makes me feel tolerably secure from *post partum* hemorrhage; and I have felt safe in leaving my patient quickly—an important matter when I have frequently attended three labors in a night, occasionally five, and once seven."

Prophylactic Intra-uterine Injections.

The value of antiseptic uterine injections after delivery, as a preventive of puerperal fever, has been actively discussed, by STADFELDT, of Copenhagen, HOFMEIER, of Berlin, and others. Most of the ultra-Listerians claim that the employment of it has greatly reduced the mortality from parturient fevers and septic poisoning. Lately, however, a number of serious accidents have occurred from its use, and even HOFMEIER acknowledges that it is a risky measure, which demands decided precautions. Some of these are as follows:—

The canula introduced should be made of metal, glass, hard vulcanite, or other substance which can be thoroughly cleansed and disinfected. Gum-elastic materials are condemned because they quickly become soft, and when cracked readily absorb septic matter. The vessel from which the fluid is drawn should be known to be pure and clean, and should be at a higher level than the patient's body, otherwise there is a constant liability to inject air. Lastly, the fluid should flow in a steady and gentle stream, not in an unequal and jerking manner.

Hot Water Injections to Facilitate Labor.

Dr. WALTER, of Manchester, England, lately read a paper before the Medical Society of that city, on what he announced as a "new and simple method of overcoming many forms of tedious labor." This method was the use of *hot water injections* into the uterus. He advocated this procedure in the following cases:—

1. In podalic version, especially in those cases where, from early escape of the liquor amnii, the uterine walls have become moulded to the body of the fœtus, rendering thereby the introduction of the hand dangerous, or almost impossible. 2. Whenever cephalic version is difficult. 3. When bipolar version is difficult to accomplish, from escape of the liquor amnii, and is required to be performed quickly, before the os uteri is much dilated, as in cases of partial placenta prævia, or some severe cases of accidental hemorrhage. 4. In rectifying mal-presentations, such as returning a hand or an arm into the uterus; in changing a face or a brow presentation into a vertex; in these cases, one could not speak in too high terms of its usefulness. 5. Retention of the placenta, when arising from irregular uterine contractions, or what is known as the hour-glass contraction; also in cases of abortion, when the placenta or membranes are retained. 6. Where

one is without chloroform, or the patient is either unwilling or unfit to take an anæsthetic, the injections will be found not only useful in aiding version, but, by their dulling the sensibility of the uterine tissue to pain and lessening its susceptibility to contusion, the danger of rupture will be found diminished, as well as the risks of metritis.

In addition to the cases above enumerated, one might also add rigid os; locked twins; and the delivery of monsters. In alluding to the precautions to be observed while employing this treatment, Dr. WALTER drew special attention to the importance of seeing that the syringe is a strong one. The tube for insertion into the uterus should be twelve inches in length, and fastened to the syringe by means of a screw. Too much attention could not be paid to filling the syringe thoroughly with water prior to inserting the tube into the uterus, so as to avoid any chance of injecting air.

The patient should be placed on the left side, in the obstetric posture; but when more than ordinary difficulty is present, either in performing podalic version, or returning a presentation from the pelvic cavity, the semi-prone posture, with the pelvis raised, was recommended. The temperature should always be taken with a thermometer, and at least one degree allowed for cooling while passing through the syringe. The quantity of water usually required for injection is a pint and a half. Dr. WALTER considered that the intra-uterine injections should never be resorted to before the membranes had ruptured and the liquor amnii had escaped; lest a rupture of the uterus should occur; but this did not preclude vaginal injections of hot water for rigid os, or even for inducing premature labor, which for many years has been known to the profession.

Paralysis of the Sphincter Ani After Childbirth.

A case of this accident is reported in the *Bull. de Therapeutique*, October 1880, by Dr. LARGER. The woman had been delivered by the forceps, without special difficulty, and returned after several months with the statement that she could not retain the contents of the bowels, escaped gas, etc. On examination, the parts were found normal, except that the sphincter was paralyzed, owing, no doubt, to the pressure of the child's head. After some other means, as ice, suppositories, etc. had been tried in vain, Dr. LARGER injected a gram of a 10 per cent. solution of Bonjean's ergotin close to the anal opening. The improvement was immediate, and after the fifth injection she was discharged cured.

Rupture of the Uterus.

This frightful accident is the subject of a careful study by Dr. RICHARD FROMMEL, in the *Zeitschrift fur Gynäkologie*. A number of cases occurring in the Berlin clinic gave an opportunity to seek for a more successful treatment than that usually adopted. The unfortunate results of laparotomy in many cases led Prof. SCHRÖDER to look with little hope on this procedure. FROMMEL, while not wholly renouncing that operation in some cases, finds that in recent ruptures the patient does far better under antiseptic precautions and drainage. After removing the child he irrigates the uterus with a warm two per cent. solution of carbolic acid; inserts a thick drainage tube; places ice bags around and on the abdomen; and gives moderate doses of opium to quiet the peristaltic action. Strict antisepsis is observed, and in five cases he reports the patients recovered.

Obstetrical Experiences.

Dr. DAVID M. WILLIAMS, of Liverpool, in an abstract of 2500 confinements "chiefly among the comfortable middle classes," given in the *British Medical Journal*, states that he considers the forceps a great boon, always to be used with comfort and safety, without injury to the mother, and in only one case did he find craniotomy necessary. For over twenty years he has introduced the forceps into the uterus, often saving the child by that means, when the os was very narrow, but dilatable. He had only employed chloroform in the first stage, to overcome rigidity; in the second stage he often administered it till complete unconsciousness was produced, believing that the perineum may thus be frequently saved from rupture, an accident which will sometimes occur after every precaution. He has cured a complete rent, involving the sphincter, without operation, by rest, local cleanliness, and the induction of temporary constipation by opium. He trusts in ergot especially as a preventive of flooding in cases where the pains are weak and the intervals long. He denies, on the evidence of distinguished travelers contrasted with the records of contemporary British practitioners, that puerperal mortality is the result of civilization. The truth is quite the other way, and by acting on increased knowledge, more lives will yet be saved.

(To be continued.)

CORRESPONDENCE.

A Question and a Reply.

ED. MED. AND SURG. REPORTER:—

In a communication in the MEDICAL AND SURGICAL REPORTER, for July the 30th, by Dr. C. H. Shivers, of Haddonfield, New Jersey, entitled "More About Maternal Impressions," in reply to a communication of mine of the 16th, some doubt is intended to be cast upon the truth of certain passages therein. Let me say to Dr. Shivers, and the host of other unbelievers, that every word of those tales can be verified from eye-witnesses to the facts.

The first story was related to me by Mr. J. E. Ward, of this city, a personal friend of mine, who is not given to prevarication of any kind. Mr. Ward is one of our most prominent "fellow citizens," a man whose integrity and veracity are of the first order, and whose word is equal to his bond at any time with us. Mr. Ward will be glad to furnish all information desired concerning the same, and will feel it a privilege to answer any inquiries making their appearance, if directed to him.

The other stories will be substantiated by Mr. John W. Welsh, of this city, upon application, whose wife is the mother of the first three cases bearing "marks," and the mother also of the very interesting and exceedingly handsome young lady whose left buttock is the objective test of the bunch of blackberries, *changing with the season.* The tale of the hair-switch will also be accounted for by Mr. Welsh.

The *Obstetric Gazette*, of Cincinnati, Ohio, will contain a communication of mine next month, upon cases somewhat similar, all of this neighborhood, with the names in full of the parties afflicted or their referees. From this communication I take the liberty of extracting the following paragraphs, in reply to the second part of Dr. Shiver's paper, touching the philosophy of these "impressions:—"

"The superstition of our aboriginal grandparents is about to be verified by science, and the old wives' love of maternal impressions will yet become an absolute fact. It is not best to cast aside a popular superstition, such as this is and has been through many ages, for truth is more likely to be in it than out of it, though all the *savans* of the earth were unable to explain it. Such has been the experience of some of our greatest facts in science, in almost every instance and in almost every age. Popular impressions are never wholly without foundation, as proven thousands of times by the experience of the world, though medical science is the least likely to adopt them, and the slowest to recognize their merits.

A writer in the Medical and Surgical Reporter, of Philadelphia, of recent date, in reply to an article of mine on the *Maternal Longings and their Influence on the Fœtus in Utero*, proposes the question why no more women, in this condition, have children marked by these longings or strange frights than are really purported to be, since pregnant women are always longing for something unattainable, and are forever on the watch, like a shying horse, for something to get frightened at. The question must be met by others of equal profundity and of equal uncertainty of expression. Why are we not all affected alike by the same strange sights of this world and the same profound mysteries of the hereafter? While some of us are moved to tears and repentance, and to an acceptance of the Messiah of the past and future, others remain stoical throughout, neither believing nor receiving, though the world goes down in darkness before them. Why are we not all impressed alike by the same moral emotions, by the same physical and psychical evolutions constantly going on in our midst? Why are we not all stricken down by the same epidemic, though living under the same roof and under the same hygienic conditions of our brother, who is taken? To say that it is a matter of constitution; of birth, education, habits, various circumstances and conditions of life found in one and not in the other, attainable by one and not by the other; of the relative rates of nerve force and nerve resistance, is to admit the truth of our arguments and the eternal laws of nature made and provided for us all."

Peabody, Kansas. Chas. H. Miller, M.D.

Pow-wow Doctors.

Ed. Med. and Surg. Reporter:—

In your issue of August 20th appeared a note relative to *Pow-wow Doctors.* A few weeks ago I happened to visit the "office" of the one presumably referred to.

I had spent the morning in Carpenterville, New Jersey, and during the afternoon rowed across the Delaware to a country tavern situated immediately opposite. I went over for dinner, but finding that the rural arrangement of meal times had put that out of the question by three hours already, I had nothing to do but wait for the "family supper," which was served at five o'clock.

Fresh from reading what sanitarians say about the healthfulness of country homes, I was greatly surprised to find the majority of the guests in apparently very feeble health. Perhaps my astonishment was noticed by the buxom landlady: for at the supper table she undertook to explain that "the folks here is pretty sickly looking since as most of them comes to see the sailor doctor. That there room's his office." The sanctum of this celebrity was a small room, bookless, of course, but well littered with aromatic herbs, which gave forth a heavy, almost sickening, fragrance.

As soon as the conversation was started, every guest had his or her contribution to make toward the narrative of wonderful cures, "after all the old school doctors couldn't help her," wrought by the sailor doctor, and his silent partner, the new moon.

I should have much enjoyed meeting so distinguished a personage; but, unfortunately, he was not at home, and his reason for absence was hinted at with so many ambiguous winks and shrugs that I concluded the most likely explanation was that he had gone to settle up his last month's business with his lunar partner. Deprived of the presence of the master, I tried to ingratiate myself with the disciples. Nearly all of them were women, and, for the most part, sufferers from nervous diseases.

Some had come from the neighborhood of Wilkesbarre, and I was informed that it was not unusual for invalids to travel from places as distant as Harrisburg and Lancaster. All expressed unbounded confidence in the powers of the mysterious healer; but they were cautious about unveiling to my profane gaze, the methods of his treatment.

I learned, however, that he takes his patients out for promenades in the moonlight. (Item—That seems a popular treatment with women, even when in the bloom of health.) He also,

gives medicines "harmless, made altogether of herbs."

One poor girl, a melancholy epileptic, who, after suffering much at the hands of sundry irregular doctors, had come a long way to this shrine of superstition, was more communicative than the rest. She told me that the doctor was giving her a great deal of medicine, and her fits were now less violent and frequent. The "herb" administered in this case was described as a white, grainy powder, with a salty taste. An eruption of acne was beginning to appear on her face. From her description of the size of the doses, I presume she was taking two or three drachms of bromide of potassium daily. This sailor doctor makes, it is said, a great deal of money. Probably, his mummeries are simply a cloak to hide the hand of some sharp, but rascally physician, who, in reality, directs the treatment, and pockets the moon's share of the swag.

Philadelphia. JAMES W. WALK, M.D.

NEWS AND MISCELLANY.

The Yellow Fever.

The National Board of Health announces that vessels on which cases of yellow fever have recently occurred are constantly leaving the port of Havana and other infected ports, for ports in the United States, without the bill of health required by the statute.

All our southern ports, especially, are greatly exposed in consequence of this failure to comply with the law, and quarantine and other health officers are urgently requested to exercise the utmost vigilance in regard to vessels from all ports within the yellow fever region. It is known, too, that smallpox exists in epidemic form, at many of the ports now infected with yellow fever, and to guard the people against the possible ravages of one or both of these dread diseases will require the most careful and determined efforts of health and quarantine officers in each of our southern ports. All vessels, therefore, from ports liable to infectious or contagious diseases, especially those in which yellow fever prevails, or is likely to occur, should be subjected to the most rigid examination, and be regarded as suspected vessels, unless provided with the bill of health, showing a strict compliance with all the requirements of our law.

It is announced officially by the health authorities at New Orleans, that there has not been a single case of yellow fever in that city this year, nor any case nearer than the Ship Island Quarantine Station. That accounts for New Orleans being so forgotten, of late.

Something Curious About It.

It is a little curious, come to think about it, that all the best surgeons in the country are now editing New York papers.—*Boston Transcript.*

Doctors and the Death Rate.

A Boston paper observes: "There are fourteen hundred doctors in Philadelphia, and the Ledger publishes the longest list of deaths of any paper in the whole country; but, of course, there is no connection between these two facts."

Items.

—Dr. Bliss is quoted as saying that he regards the conduct of Dr. Hammond, of New York, in commenting upon the President's case, as "unprofessional, ungentlemanly, and indecent." Let us hear Dr. Bliss' opinion of Dr. Bliss' treatment of Dr. Baxter, for years the President's personal physician, whom Dr. Bliss refused to allow even to see the patient.

OBITUARY NOTICE.

—C. C. Rogers, M.D., aged 50, of N. Troy, Vt., died, August 18, from softening of the brain. Dr. Rogers has been prominent in local politics, had been a member of the legislature, and has held many offices of importance in the State.

QUERIES AND REPLIES.

Dr. N L. F., of N. H.—Stertor or stertorous breathing is a term applied to that deep snoring caused by relaxation of the velum palati, the result of cerebral oppression, which accompanies apoplexy, fracture of the skull, dead drunkenness or narcotism by opium, while by the term snoring is usually understood the same sound, only less intense, which occurs when sleeping with the mouth open. The sound is produced (Flint) by vibration and a sort of flapping of the velum pendulum palati, between the two currents of air from the mouth and nose, together with a vibration in the column of air itself.

Dr. T. S. P., of Cal.—The full proceedings and transactions of the International Medical Congress will appear in a massive volume, expected to cost twenty thousand dollars or so, plates and all. Probably, it cannot be ready before spring.

Dr. J. A. F., of Pa.—Actual graduates of the Eclectic College of this city, before 1872, can be registered in this State. Later graduates have no legal standing.

Dr. S. R., of Ga.—It is impossible to decide on the relative merits of the cinchona alkaloids and mixtures. The claims put forward for the mixture you speak of, manufactured by a firm in this city, we have but limited confidence in.

Dr. Winters.—We do not recommend using bovine virus in summer, short of an absolute necessity, as a temperature above 70° is apt to deteriorate it rapidly.

MARRIAGES.

ANDERSON—PAYNTER.—On the evening of July 4th, in the Belmont M. E. Church, N. W. corner Forty-third and Aspen streets, West Philadelphia, by Rev. C. C. McLean, Daniel M. Anderson, M.D., and Miss Emma M. Paynter, all of this city.

SMITH—MORROW.—In Martinsburg, Pa., at St. John's Reformed Church, on Tuesday, July 5th by the Rev. J. D. Miller, assisted by the Rev. J. C. Thomson, Dr. Horace R. Smith, under appointment as Medical Missionary to China, and Annie L., daughter of James Morrow.

DEATHS.

HENDRIE.—On Sunday, July 10th, at his residence, in Holmesburg, Dr. W. Scott Hendrie.

RICHARDSON.—In Brooklyn, on Sunday, August 14th, Dr. Edward T. Richardson, aged sixty-seven years.

THE

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Original Department.

Communications.

UNPUBLISHED LETTERS AND LECTURES OF Dr. BENJ. RUSH.

BY FREDERICK HORNER, JR., M.D.,
Of Salem, Va.

The materials for this publication were bequeathed to the writer by his grandfather, the late Robt. H. Little, M.D., who was, in 1798, the pupil of Dr. Rush and a student of the University of Pennsylvania. In a letter to a friend in Virginia, Dr. Little thus wrote of his preceptor: "The old gentleman is a man of the most fascinating manners, and his mind superior to any I ever knew. He meets his class in the morning with smiles and leaves them in the same good humor; in short, it would take the pen of an Addison to portray the perfections of this great man." In 1804 Dr. Rush thus wrote to Dr. Little, at the time practicing his profession in Prince William County, Virginia: "I have only to advise you in your present contest with the powerful and insidious epidemic (bilious remittent fever) to accommodate your remedies to the state of the system by all modes of treatment. There is certainly a right one, and I sincerely wish you may find it. It is an old and true remark in our country that in very rainy seasons low situations are healthy and high ones sickly, from the former being *completely* overflowed with water, and the latter having no more upon them than just enough to favor putrefaction. Tell your farmers who complain of the plaster-of Paris as the cause of their sickness, that the potato was banished from France by an edict of the government, because a sickly season followed in a few years its cultivation in that country. The people after a while discovered their mistake and recalled the potato from its banishment. I hope the plaster-of-Paris will not be dishonored, nor the science of our country be degraded, by a similar act. Our city is unusually healthy; the heavy rains, by washing our streets and common sewers, have been the means, in the hands of Heaven, of making it so.

Health and happiness.

Yours sincerely,

Phila., Sept. 5, 1804. Benj. Rush.

Lecture 1st. "On the Pulse."

"The prognosis of diseases crept into medicine at a time when the duties of a priest and physician were joined to exclude pain as a disease, and also debility. Morbid action most usually shows itself in the arterial system. The arteries are the sentinels or the outposts, as it were, to the whole body, and are, therefore, the parts upon which attacks are most commonly made. Debility is not a sign of danger in the commencement of an acute disease, though it is at the close of it. Many patients die from mere debility after a disease is removed, yet it is, therefore, the duty of a physician to endeavor to prevent it. Let us attend to the signs of disease as they appear in the pulse. The blood vessels are, as I have before proved, the "prunum vivens" and "ultimum moriens" of the living human body, as Harvey long ago discovered, and Haller has demonstrated. It is proper, therefore, to refer to them, for this gives us information of whatever is going on in the body; this it does from its ultimate connection with every part of it; they are to the body what the dial plate and hands are to the watch. Physicians usually distinguish disease by other signs; for instance, the tongue, respira-

tion, countenance, etc. Others have a predilection to the state of the excretions, as the urine, sweat and fæces. I reject none of these, but rely principally on the *pulse*, and I hope my pupils will be everywhere known for their knowledge and predilection for the *pulse* in forming a judge ment of diseases. It is remarkable that Hippocrates and Celsus took no notice of the pulse. Galen was the first who attended to it. I shall first relate some facts on the history of the pulse: first, in its natural state; secondly, in all its morbid states, and thirdly, the best manner of discovering them with the finger.

First. In old people the pulse is always slow and intermitting, and according to Morgan a regular pulse in them is a sign of disease. I have found this true, and have profited by the information, for you might bleed an old man to death if you attempted to make his pulse regular. The fullness and slowness of old people's pulses is owing, perhaps, to an abstraction of excitement from the muscles to the arteries, though it would seem as if excitement was never lost in the arteries. The pulse descends as low as 40 and even to 30, and according to Dr. Haberden, to 26, in old people. Sex influences the frequency of the pulse; it is quicker in women than in men. Difference of civilization has the like effect; it is slow in savages. In eight out of ten Indians who were in this city some time ago, I found the pulse from forty to sixty in a minute; the two in whom it was more frequent, one was sitting near a fire, and the other was the son of a Frenchman by an Indian mother. The slowness in the pulse of savages is owing to the want of stimulus of thought and labor in them. It is slower in the inhabitants of the country than in those of cities. I wish these experiments would be extended to people of different nations, and of different employments and occupations, as I have no doubt but they influence the frequency of the pulse; size will do this; it is quicker in short people. Climate and season also influence the pulse. In the West Indies it is about 100 per minute. It is slowest in the inhabitants of cold climates. In the inhabitants of Greenland it is as slow as forty in a minute; it is slower in the winter than in summer, and is slower at different times of the day and in the morning, quicker at noon, and quicker still at night. It is different in sleeping and waking; in sleep it is slowest. Different positions of the body likewise influence the pulse. When the arm is exposed for some time out of bed, to the cold, its frequency is reduced. It is quicker in the arm not lain upon. It is slowest on our backs, quicker on our sides, quicker than this when we sit up in bed, and quicker still when we stand up. Food and drink influence the pulse. It is quickened by a full meal or malt liquors; it is bounding, frequent, and full after a hearty meal, called by some the fever of digestion. All the passions of the mind influence the pulse. The stimulating passions, as hope and joy, increase its frequency. The sedative passions, as fear, terror, grief and anger, reduce its frequency and force; that is, before stimuli act upon the accumulated excitability which follow those sedative passions. Conversation quickens the pulse from seventy to ninety strokes in a minute. In some persons in good health the pulse is preternaturally slow or quick. In a lady whom I attended it was in health never above forty strokes in a minute, and in fever it seldom rose above fifty or sixty. In Judge Peters, of this city, in health, it is always above 100 per minute. In some people the arteries run above the radius parallel to the thumb. It is of consequence to know especially when it occurs in our habitual patients. The following circumstances also affect the frequency of the pulse: 1st. Age. It is from 130 to 140 at birth. During the first year it is from 108 to 120; during the second year it is from 90 to 108; it continues from 80 to 108 during the third, fourth, fifth and sixth years of life. At the seventh it is 60 to 80, the same as in adults.

2d. I now consider the pulse in a *morbid* state, viz., when it departs from order and regularity; first, by *frequency*, I mean the number of strokes in a minute. By *quickness* I mean the greater or less time in which a pulsation is performed. It may be quicker without being frequent. This often occurs in the yellow fever; its frequency is occasioned by morbid irritability in the blood vessels. In a natural state of the pulse in middle climates its frequency is from 60 to 80; its medium is 66; the pulse, from an excessive frequency, may be from 70 to 180, and even to 200, and from a defect in frequency it falls to forty and even ten, as occurs in apoplexy. It becomes frequent by a morbid irritability in the blood vessels, and morbidly slow, from indirect debility; a second cause may be pressure on the brain, as in hydrocephalus; third, from spasm of the heart, and fourth, from a defect of irritability in the arteries induced by the excessive force of contagion; the pulse is sometimes intermitting; there is often an interval after the third stroke. This is common in all malignant fevers; the full, frequent, and quick pulse, without hardness, occurs in the beginning of pleurisy, and in common bilious fevers, and in

pneumonia; this I call squachus. 2d. A full, frequent, and tense pulse, which occurs in rheumatism, gout, and sometimes in yellow fever. 3d. A quick, frequent, but tense and small pulse, which occurs in chronic rheumatism and pneumonia. 4th. There is a typhus pulse which is frequent, but destitute of fullness, or tension; this occurs in low chronic fevers. 5th. There is the depressed or locked pulse, which is scarcely perceptible, and is often as slow as forty; it occurs in malignant fevers, and in plague, yellow fever, smallpox, and pleurisy. In the latter disease Dr. Quinn distinguishes it from the weak and low pulse: first, from its occurrence in the beginning of acute diseases, and in the paroxysms of fever; 2d, from its rising and increasing in force after the diminution of pressure in the brain and lungs; 3d, it is distinguished from a weak and low pulse occurring in inflammations of the stomach, the bowels, and brain, and 4th, from a sense of tension imparted to the finger upon pressing the artery. I never felt a pulse in those cases slow and weak, but always weak and quick. There is the corded, catgut pulse; it strikes in so forcible a manner as to convey an idea of resentment, and occurs in all malignant fever. Lastly, there is the hectic pulse, occurring in hectic fever, gout, ulcers, etc. In palsy the pulse is full and bounding, often tense and fuller in the arteries of the affected side than the opposite. This state occurs in acute dropsy, and after effusions, without great morbid action. The weak and low pulse occurs often from mere debility, and in hypochondriasis, likewise at the close of malignant fevers. Sometimes there is an absence of pulse for hours, and even days, without the extinction of life. This mostly occurs in stomach and bowel complaints. I shall, in conclusion, add a few directions for feeling the pulse: 1st. Feel the pulse of a patient before he describes his disease, as conversation influences the celerity of the pulse. Apply your four fingers over the artery. In doubtful cases feel the pulse of both arms, and in a position free from pressure, and in which fewest muscles act, and do not feel less than twenty strokes. I have frequently known an intermission after the eighteenth stroke. The Chinese count forty strokes. This may be the reason why they prescribe with so much accuracy and skill. When the artery of the wrist cannot be felt, have recourse to the temporal artery, especially in complaints of the head; the pulse should always be felt previous to venesection, and before prescribing opium, emetics, purgatives, tonics, and stimulating drinks or diet.

The *prognosis* from the pulse is simple. Few patients recover from a fever after it has passed 180 in frequency. The pulse is said to become languid, or insensible, just before death. Dr. Ramsey, of South Carolina, says, he has sometimes known the last pulsation uncommonly full.

I conclude this lecture by observing that the following inscription ancient history records was placed over the door of the Temple of Plato:—

"Let no one enter here who is not acquainted with Geometry."

Were I to erect a Temple to Medicine, I should inscribe over the door of it:—

"Let no one enter here who is not acquainted with the Pulse."

EXSECTION OF THE ENTIRE RADIUS.

BY C. C. FIELD, M.D.,
Of Easton, Pa.

The only other case on record of removal of the entire radius, is that of Dr. Carnochan, of New York. In his case, the injury was the result of a blow, in a man of strumous aspect, upon the upper part of the forearm, which was followed by ostitis, caries, and abscess of the bone. In the removal of the bone he divided it at its central part, in order to facilitate the detachment at its articular extremities. When the man recovered, he had still rigidity of the elbow joint, due to the antecedent disease, the hand was drawn slightly toward the radial side of the arm, and the styloid process projected more than natural. He could carry a bucket of water without difficulty, and write; the functions of the fingers are not diminished; sense of touch good as ever; motion of wrist good; flexion and extension of hand made without difficulty; the hand can be turned prone, supine, adducted and abducted; extension of wrist and fingers can be made.

The bone, when removed, measured a little over four and three-quarter inches, and its weight seven and a half ounces. A healthy radius weighs from two ounces and one drachm to two ounces and two drachms.

On the 20th of May, 1878, I was requested to visit Jacob, son of Franz M. Hans, residing on Church street, of this city, for an injury that he had sustained to his left arm while playing with his companions some time before. On examining the arm, it was found to be much swollen, red, and exceedingly painful on pressure. A number of fistulous openings also existed between the wrist and elbow, from which pus of an unhealthy character was exuding. On examining the bone through the openings, with a long probe,

it was readily discovered, that the surface of it was not only rough, but in several portions the instrument passed directly into it, establishing, without doubt, its carious condition. A further exploration showed that the bone at its upper portion was enlarged, rough, and of a cancellated structure, leaving no doubt as to its necrosed state. The condition of the bone being thus decided upon, and the boy, as well as his parents, being willing to submit to any treatment that would afford him a hope of relief, he was informed that nothing less than an operation, to which he cheerfully assented, would free him from his extreme suffering, and give him a chance for the future use of his hand and arm. As his system was much impaired in consequence of the pain which he had endured, and the free suppuration from the sinus openings, it was considered advisable to put him on a tonic treatment and nourishing diet, and to apply such local means as appeared proper, which was continued until the 14th of August, when the operation was performed in the following manner, assisted by Drs. Ott and Heller, and Wood, Field, Knecht and Prendergast:—

The patient was placed supine upon the operating table. The assistants were arranged so as to support the body and extremities, and to be in position to hand the instruments and sponge the wound.

Dr. Heller cautiously administered the chloroform (giving him previously about two ounces of brandy) until he was completely under the influence of the anæsthetic. The forearm was flexed at about a right angle, turned inward and properly supported by assistants. At the same time the brachial artery was firmly compressed. The limb being thus arranged and steadily held, I made an incision with a strong scalpel, along the outer and posterior portion of the forearm, extending from above the elbow to the wrist, the entire length of the radius, beyond its styloid process. The integuments and fascia being thus divided, and carefully dissected down to the bone, were found firm, and to an extent infiltrated with pus. The extensor tendons, which occupy the grooves at the lower and outer portion of the radius, were carefully drawn from their position, without doing them the slightest injury, being desirous of preserving, as far as possible, all the natural functions of the hand. The dissection being continued, the entire outer portion of the bone was exposed, which was found rough, enlarged at its upper extremity, presenting a honeycomb appearance, and filled with large cavities, and numerous foramina, from its upper to its lower portion, many of them communicating with the external sinuses, causing it to present the appearance as if formed of fragments of bone held together by altered soft tissues. The lower portion of the bone was carefully disarticulated from the scaphoid and lunar, at the radio-carpal articulation, and the tendons of the flexor muscles, which pass over the internal and lower portion of it, were drawn out of the reach of the knife. The remains of the periosteum were removed by peeling it off, as it were, from the bone, and left in the wound, the interosseus ligament carefully shaved from it, its entire length, with a probe-pointed bistoury introduced at the lower, outer, and upper portion of the membrane, and being kept in close contact with the radius, was separated entirely from it without injuring the vessels, or nerves. It yet remained to liberate the upper portion of the radius, which forms an important part of the elbow joint. Its cup-like depression on its head, which articulates with the lesser, or radial head of the humerus, and the circumference of the head of the radius with the lesser sigmoid cavity of the ulna, which forms the principal action of the superior radio-ulnar articulation, were firmly locked, welded, as it were, together, in consequence of the altered condition and tumefaction of the surrounding soft tissues. These tissues were dissected from the upper portion of the radius, carefully avoiding any injury to the important vessels and nerves in the bend of the arm. The annular ligament, and the tendon of the biceps were then divided, the superior radio-ulnar articulation, and the union between the radius and humerus being separated, together with the remaining soft tissues, completed the operation. The wound being thoroughly cleansed, the edges of the fistulous openings were removed, and united with interrupted sutures, as was also the wound made by the operation. The forearm was dressed with lint, saturated with tr. opii, placed in a Bond's splint, properly padded, and lightly secured with compress and bandage. The arterial hemorrhage during the operation was slight, and readily arrested, and the profuse venous bleeding, in consequence of the extreme congestion of the forearm, ceased immediately after the operation was finished. As soon as the patient was restored to consciousness, he was freely stimulated, and morphia sulph., gr. ss., administered. He complained of pain for about an hour, when the anodyne gave him relief, and he passed into a quiet sleep. He awoke in about four hours, completely rallied. He was ordered beef tea, cream, eggs, soft-boiled, and whisky.

He rested tolerably well during the night, and although his pulse numbered upward of one hundred beats per minute, in the morning he did not complain of the slightest uneasiness, and ate a hearty breakfast of soft boiled eggs and cream. The wound presented a good appearance; lint saturated with tincture opii continued. This application in his case had a very happy effect, in completely preventing pain, and thus calming the general system. He continued to improve until the evening of the fifth day, when the suppuration was profuse, and he complained of being very weak. Whisky was given him every hour, except during sleep, and cream, soft-boiled eggs and beef essence were administered every two hours. On this course of treatment he soon rallied, and continued to improve, although the suppuration was profuse for upward of two weeks. From this period the wound healed rapidly, and at the expiration of eight weeks, the splint was removed from the forearm, a light dressing of binder's board, compress and bandage, substituted, and in a very short period he commenced using his hand and arm, having entirely recovered without a single untoward symptom. He possesses all the natural functions of the arm, forearm and hand, not having the slightest stiffness of the elbow or wrist joints, the slight projection of the styloid process of the ulnar not interfering in the smallest degree with any of the movements of the wrist or hand. He also states

that its strength is not in the least impaired, that it does not in any way interfere with his work, which is that of an ostler. He carries, with it, large buckets filled with water, and does all other work pertaining to his vocation, with as much ease as with the hand not operated on.

For the purpose of giving your readers a better idea of the above case of the entire exsection of the radius, I have had the arm which was operated on, as well as the bone which was removed, photographed, so that the extent of the operation, as well as its results, may be seen.

The length of the bone from its humeral to its carpal extremity is eight and a half inches. The circumference of the involucrum, which is at the humeral extremity, is three and a half inches.

HOSPITAL GANGRENE.

BY J. M. BATTEN, M.D.,

Of Pittsburgh, Pa.

This disease seems to have been more prevalent in Europe and the East than in this country, where, owing to the silence of the profession, it was exceedingly infrequent previous to our late war. After the battle of Gettysburg a majority of those who were wounded and were sent to the U. S. Army Hospitals in Philadelphia, were attacked with hospital gangrene, and many lives succumbed to its frightful ravage. It is probable that hospital gangrene has appeared periodically as an endemic from the earliest period, yet no description of the disease appeared in medical literature till, in the year 1783, in the writings of Pauteau, of Lyons, which were published after his death, a full and complete description of the disease was given. Afterwards, Duscassoy, in his writings, directed attention to the disease. Subsequently tracts were published by Boggie, Brauet, Blackadder, Leslie, Gillespie and Moreau, to whose joint labors we are indebted for much that is known at present of the disease. Sporadic cases have been noticed among the wounded in crowded and ill ventilated hospitals, but with the present knowledge of the importance of architecture, ventilation, and cleanliness of our hospitals sporadic cases of the disease are comparatively unknown.

It is said there were several endemics of the disease in the Hotel Dieu at Lyons in the time of Poteau, and such were their ravages that Poteau was induced to ask the question whether hospitals were not an evil instead of a blessing. The disease appeared in the Naval Hospital in New York in 1780, and it committed frightful ravages on Pigeon Island, St. Lucia, in 1781. The crew of a vessel, "Prince of Wales," suf-

fered with the disease in 1800, in her homeward passage from Martinique to England.

It is stated that the English suffered but little with this disease during the Crimean war, except during the first winter, when it prevailed in a mild form at Scutari, but it never became general or severe, notwithstanding the barracks hospital of that city, during its early occupancy by troops, was in a filthy and uncomfortable condition. Whenever any cases did occur they were immediately taken to a place set apart for this disease. On the other hand, the French suffered most fearfully, owing, as it was supposed. to their being removed, immediately after being wounded, to the hospitals of the Bosphorus, in which they were crowded together in wards of those institutions.

The wounded after the battle of Gettysburg remained in hospitals in the vicinity of that battle ground for about two weeks before they were sent to the different U. S. Army Hospitals. I remember it was July 13th, 1863 before we received our first installment of wounded at the U. S. A. Hospital, Broad and Cherry streets, Philadelphia. The disease made its appearance among the wounded at this hospital August 10, 1863. I believe the disease was general that year among the wounded at Gettysburg. I know there was not a hospital in Philadelphia which had received the wounded soldiers that escaped its ravages. It prevailed also in the U. S. A. Hospitals in Baltimore and Washington City. In the hospitals of Philadelphia few of the wounded escaped the disease in some form or other. It did not abate till the cold weather of the Fall commenced. and it was the spring of 1864 before many of the convalescents were sent to duty. I do not remember of there having been any cases in the U. S. A. Hospitals in 1862, after the battle of Antietam.

The disease is a frightful disease. It has often baffled the skill of the ablest surgeons, as those who witnessed its ravaging effects in hospitals during the late war will bear testimony. Persons may be attacked with it who have or have not an abrasion ; most generally the former. It confines itself principally to armies, hospitals, and on ship-board. It is ushered in by a chill, excessive fever, high temperature, agonizing pain at the seat of the wound. A wound that has been healing rapidly suddenly takes on a swollen, irritable aspect—a red raised border forms around the ulcer; the ulcer becoming dry, burning, and exceedingly painful ; on the immediate border of the ulcer a narrow bleb or blister forms; this is soon broken down, sloughs ; the redness of the skin around the ulcer increases; the ulcer becomes more irritable and painful ; constitutional symptoms become more grave, till the ulcer may become almost any size. The slough first attacks the skin, then superficial fascia, next cellular tissue, muscles, sheaths of arteries and veins, then arteries, veins and nerves themselves, and lastly bone. The ulcer presents a dirty brown color, and the odor therefrom is very offensive. During this suffering we have constitutional symptoms, headache, fever, loss of appetite, restlessness, often diarrhœa, tongue dry, coated brown, red round the edges. Sometimes in a debilitated patient who has received a gunshot wound, the slough makes inroads on the cellular tissue under skin and superficial fascia unobserved by the surgeon till his attention is suddenly directed thereto by hemorrhage from some vessel ; the external ulcer presenting an indolent aspect. This I have observed in one case.

I have seen a leg with all its tissues sloughed away but bone, arteries and veins. I mean middle third of leg ; the foot being in its normal condition ; the pulsation of arteries nourishing ; the foot was plainly observable.

The predisposing causes are fatigue, anxiety, scanty and improper diet, exposure, depression, nervous exhaustion ; exciting causes, wounds, crowded and ill ventilated hospitals, filth. The disease exists sometimes as an endemic. Whether hospital gangrene is an infective disease or whether it follows a condition of the system established therein by great and prolonged fatigue, mental depression, nervous exhaustion, scanty and unwholesome food, such as was the army of the Potomac subjected to previous to the battle of Gettysburg, awaiting the exciting cause to fire it up, is a question which has puzzled the ablest minds. I am certain, however, after the disease has been established it can be conveyed from a person affected to another who has been exposed to the same depressive influences ; hence a prudent surgeon will use all means that are known in modern surgery to prevent its extension. At that time, 1863, a separate sponge and basin were provided for each patient. I am not, however, certain that the poison from a gangrenous ulcer could be conveyed to a person with an abrasion, so as to produce in him the disease, he not being previously predisposed to, or not having been exposed to the same depressing influences. The disease is more likely to attack men than women or children, for obvious reasons. Men are usually exposed more to depressing influences. It is believed that the poison lies latent in the system about forty eight hours. My experience

has taught me that the time intervening between reception of wound and inception of gangrene is from forty to sixty days.

The diagnosis of this disease is not difficult; in fact, the only disease for which it may be mistaken is scurvy, but the history of the case would go far in establishing the diagnosis; besides, in scurvy the granulations are large and fungous, the surface of ulcer is bloody, the gums are soft and spongy, the constitution is not affected, no fever, pulse normal. In hospital gangrene there is fever, accelerated pulse, dry and painful ulcer with red border.

The prognosis, under good hygienic surroundings and proper prophylactic treatment, is generally favorable, especially if the patient has a good constitution. Death, however, often ends the suffering of the patient, after a prolonged drain upon his system by suppuration, or by repeated hemorrhages from important arteries, from an abscess forming in some organ, or by the blood becoming empoisoned. Patients often die from amputation or from ligation of arteries, especially when they have to be repeated. Religating arteries, sometimes of necessity, has to be performed so often that a point toward the trunk is reached where the skill of the surgeon ceases to longer benefit the patient, and he dies from hemorrhage.

The topical treatment consisted in applying the actual cautery, bromine, in its purity, or nitric acid; afterwards a large, warm linseed poultice was put over the ulcer. Sometimes the borders of the ulcer were painted with tincture of iodine. After the ulcers commenced to suppurate they were dressed with solutions of different strength of bromine, nitric acid, or carbolic acid, usually about thirty to sixty drops of either in an ounce of water. The internal or constitutional treatment was expectant. The wards of the hospitals were kept clean and well ventilated, and whenever opportunity presented patients were taken out into the open air. It was not an unusual occurrence for the ulcers to increase till they reached diameters of 2¾ inches to 4 inches, extending sometimes even in depth beyond the muscles, involving the bone. The diameters of the ulcers, from measurement: one case, ulcer of left thigh, 2¾ inches by 4 inches; another case, ulcer of right thigh, 3½ inches by 3¼ inches; another case, ulcer of scalp, 3½ inches by 2½ inches. There was one case of hospital gangrene, in which the left femoral artery was ligated three times, the external iliac twice; the patient recovered. This was the only case of ligation of the external iliac during the war, in which patient recovered.

Medical Societies.

THE INTERNATIONAL MEDICAL CONGRESS.

PROCEEDINGS OF SECTIONS.*

Sub-section on Diseases of the Throat.

Both in the number of those present at the meetings and in the distinguished position occupied in the medical world by those who took part in the discussions, the Sub-section on Diseases of the Throat may certainly be considered as one of the most successful departments of the Congress. The first paper read was one of great interest to all laryngologists, as in it Señor Manuel Garcia detailed how it came to pass that he invented the laryngoscope.

Dr. Vivian Poore's case of Web in the Larynx, probably congenital, excited considerable interest, the general opinion being that though these cases were not necessarily congenital, the one before the meeting certainly was.

Dr. Rumbold's (St. Louis) paper went to prove that the spray producer was the only plan which at the same time removed morbid secretions from the affected surfaces without causing the least irritation.

In opening the discussion on Diphtheria, Dr. Morell Mackenzie stated that, so far as local treatment was concerned, he placed his sole reliance on varnishes—*i. e.*, remedies which exclude the air from the false membrane—tolu dissolved in ether being the most serviceable. There was an almost complete unanimity against the forcible removal of false membranes or the cauterization of the affected surface. Ice in the early stages, steam inhalations, with or without antiseptics, in the later stages, were generally recommended. Lactic acid and lime water were praised as being the best solvents, and boracic acid as an antiseptic. In opposition to the views generally held, Dr. Meyer brought forward, for Dr. Nix, a Danish medical practitioner, his plan of treatment, which consisted in scraping away the false membrane and cauterizing the scraped surface with solid nitrate of silver. Dr. Lennox Browne recommended the removal of enlarged tonsils, even during an attack of diphtheria, if they offered any impediment to respiration. In the discussion on the "Pathology of Laryngeal Phthisis" there was great difference of opinion, both as to the early recognition of the disease and its diagnosis from syphilitic ulceration. Professor Krishaber, of Paris, considered the diagnosis of tuberculous laryngitis during the patient's life very easy, whereas Professor Rossbach, of Wurzburg, was of opinion that certain diagnosis of laryngeal consumption was only possible if pulmonary consumption be simultaneously present, otherwise tubercular and syphilitic ulceration can only be distinguished from each other by their different behavior to iodine. On the other hand, Dr. Fränhel, of Berlin, said that the treatment by iodide of potassium would not differentiate it from syphilis, as tuberculous ulceration sometimes heals under the iodide. As regards prognosis, the view of the laryngologists who spoke was more hopeful than that generally held by physi-

* Prepared principally from the report in the *Lancet*.

cians. Professors Gerhardt and Rossbach (both of Wurzburg) asserted their belief in the absolute curability of the disease.

The discussion on the motor neuroses of the larynx centred chiefly on the clinically and anatomically proven fact of the proclivity of the abductor fibres of the recurrent nerve to disease, both central and peripheral. Professor Gerhardt, who introduced the subject, was opposed, in the present state of our knowledge, to any premature hypothesis to explain this curious fact. The papers introducing the discussion on "Neuroses of Sensation of the Pharynx and Larynx" were very opposite in character, that of Professor Schnitzler, of Vienna, being a short practical one, whereas, the one sent in by Professor Elsberg, of New York, and read (in part) by Dr. Morell Mackenzie, was very elaborate.

In discussing the formation of Mucus in Larynx and Trachea, Professor Rossbach pointed out that the secretion was independent of central nerve influence. Dr. Fränhel drew attention to the fact that the conditions in the trachea on which the author had based his statement were different from those in the nose and pharynx. Dr. Bayer, of Brussels, in his paper on "Influence of Female Genital Organs upon Organ and Formation of Voice," detailed all the possible consequences of this connection. Drs. E. Fränhel and Semon insisted that the prognosis in these cases ought to be guarded, as even when apparently dependent upon uterine disease, the cure of this latter was not necessarily followed by the cure of the laryngeal trouble. The discussion on "Indications for Extra or Intra-Laryngeal Treatment of Growths in the Larynx," which was opened by Dr. Fauvel, of Paris, and Professor Burow, of Königsberg, affirmed the statement of the latter, that only if an experienced laryngologist had established the inexpediency of the intra laryngeal treatment may the extra laryngeal method be adopted; the only marked exception being in favor of thyrotomy in certain cases. Dr. Solis Cohen, of Philadelphia, and Professor Lefferts, of New York, were, however, rather more in favor of the extra-laryngeal mode than their German *confrères*, but even they limited it to exceptional cases. There was a general agreement with Dr. Semon, that of necessity the removal of intra-laryngeal growths must remain in the hands of laryngologists who had devoted special attention to the subject.

Professor Krishaber pointed out that in children the removal of laryngeal growths may be accomplished with comparative ease, by guiding the forceps into the larynx by means of the fore-finger, and seizing the growth without the aid of the mirror.

Dr. Hering's (Warsaw) paper on the Results of the Mechanical Treatment of Laryngeal Stenosis was based upon statistics of all hitherto recorded cases, one hundred in number. He attributed the want of success reported as not due to the insufficiency of the method, but evidently to want of patience on the part of the patient or surgeon, or to the non-adaptability of the plan of treatment to the particular case. This view was agreed to by all who took part in the discussion.

The discussion on Indications for the Complete or Partial Extirpation of the Larynx, which was opened by Dr. Foulis, of Glasgow, revealed a great difference of opinion between the surgeons and the laryngologists, the former being disposed to include a larger number of cases among those suitable for the operation than the latter. Professor Czerny of Heidelberg, to whose careful experiments we are indebted for this operation, was present and spoke on the question.

Professor Voltolini, of Breslau, the oldest advocate of the method, introduced the discussion on the Galvano caustic Method in Nose, Pharynx, and Larynx. The general opinion was in favor of this plan in the nose and pharynx; in the larynx its utility was more doubtful. Some of the speakers, notably. Dr. Foulis, dwelt on the advantages of the actual cautery.

In his paper on the Pathology of Nasal Catarrh, Dr. Bosworth, of New York, asserted that rhinitis atrophica was a primary affection, and not a secondary stage of the hypertrophic variety.

The subject of Adenoid Vegetations in the Vault of the Pharynx, was introduced in an exceedingly able paper by Dr. Meyer (Copenhagen), to whom the credit of having first directed attention to these growths must be assigned. His statements were supported by Dr. Löwenberg (Paris), in his introductory paper. Both remarked on the frequency with which this affection is overlooked, and dwelt on the importance of directing more attention to it, as it is so frequently the cause of ear troubles, nasal voice and nasal respiration, and even affections of the conjunctiva. These growths are almost exclusively met with in childhood and youth, hardly ever occurring after the age of twenty-five. As regards treatment, very different methods were suggested, the most remarkable of which were those brought forward by Drs. Meyer, Löwenberg, and Guye.

The discussion on the Nature and Treatment of Ozæna elicited a great difference of opinion. Dr. Krause's view, that the fetor, which is such a prominent feature in these cases, was due to the formation of fat and the decomposition of fatty acids, did not find any supporters. For the palliation of this disease, which all agreed was not curable in the strict sense of the word, syringing after Michel's plan and the use of Gottstein's tampon were recommended.

The demonstration of patients, instruments, etc., for the Sub-section of Diseases of the Throat, took place at the Hospital for Diseases of the Throat and Chest, Golden Square, and was very numerously attended.

Dr. F. Semon showed an interesting series of five cases of Bilateral Paralysis of the Abductors, on one of whom he had to perform tracheotomy for the relief of impending death from asphyxia, and one case of Anchylosis of the Crico-arytenoid joint.

Dr. Poore exhibited a patient with a Web in the Larynx, probably congenital.

Professor Krishaber brought for inspection a set of Tracheotomy tubes; he stated that there is a definite relation between the height of the body and the diameter of the trachea, consequently the size of the tracheotomy cannula should be adapted to the patient's height.

Dr. Foulis showed an apparatus for heating the actual cautery, also instruments for removing larynx, artificial larynges, and two larynges he had removed.

Dr. Cresswell Baber exhibited a self retaining nasal speculum, and a snare which could be fixed at any angle.

Dr. Michel demonstrated his method of removing adenoid vegetation by means of the galvano-caustic loop.

Dr. Fränhel exhibited a mouth dilator, a modification of Whitehead's, with the addition of a palate hook. This may be regarded as one of the most valuable of the instruments exhibited. He also showed a prism for inspection of the cavities of the body.

Dr. Morell Mackenzie sent a patient on whom he had performed internal œsophagotomy, and a case of spasm of the tensors of the cords, and showed his œsophagoscope. Störch's Œsophagoscope was also shown.

Dr. Whistler exhibited a patient with syphilitic stenosis of the pharnyx, in whom he had established a communication between the pharnyx and posterior nares. Dr. Cadier exhibited his tube larnygoscope, a most inconvenient and unpractical instrument. Dr. Tornwaldt showed a tampon filled with water, for the dilatation of laryngeal stenosis. Dr. Bosworth brought forward his mode of removing polypi, insisting on the advantage of using No. 5 steel piano wire. Dr. Rumbold showed his spray producers; Mr. Spencer Watson a self-retaining nasal speculum, and other instruments for the treatment of diseases of the nose, and Dr. Prosser James a series of larnygeal lancets and probes, each being forged out of one piece of solid steel.

Section on Surgery.

Mr. Erichsen's address was a very apt introduction to the work of this section, for after a few introductory remarks on the progress of surgery, he briefly alluded to each of the eight subjects specially chosen for discussion, and tersely pointed out the main lines along which such discussions could most profitably proceed. After the address, Staff Surgeon Reid, who was the first to treat aneurism by Esmarch's elastic bandage, opened a discussion on this subject, with a paper recording his own case, and pointing out that sacculated aneurisms were the only ones suited for this treatment, which cured the aneurism by causing coagulation of the whole mass of blood in the sac. Mr. Pearce Gould followed, much on the same lines; he gave a table of sixty-two published cases in which this treatment had been employed, from which he drew the conclusions that the more important element in the cure is the organization of the clot in the artery itself, and that failure may result either from the blood not clotting at all, or from washing away of the clot first formed. He further pointed out that the danger of over-distending the other arteries, or of overtaxing a weakened heart, ought to be guarded against, and that preparatory treatment to increase the plasticity of the blood was desirable. Mr. Bryant referred to three cases in which he had failed to cure the aneurism, and regarded the capillary hemorrhages in the part of the limb not emptied of blood as liable to lead to gangrene. Mr. Pemberton related a case, fatal from gangrene, where it was found that the vein was completely obliterated opposite the aneurism, which was occluded with coagulum.

Mr. Spencer Wells opened the discussion on recent advances in the surgical treatment of intra-peritoneal tumors, and the points upon which he laid stress were the necessity for union of the edges, or rather surfaces, of the cut peritoneum, so as to ensure immediate union; the great value of pressure forceps for the control of hemorrhage; and the fact that the use of antiseptics has done away with the need for drainage; during the last three years he had not used drainage once, though he thought two or three patients had died who might have been saved by it. Dr. Marion Sims strongly advocated drainage, though admitting it often led to ventral hernia; while Drs. Keith, Thornton, and Martin advocated it for severe operations only, and in cases of cysts with putrid contents. In reference to removal of uterine tumors, in addition to the citation of interesting cases by several speakers, the main outcome of the discussion was that the operation was rendered safer and attended with less loss of blood when the tumor could be raised out of the wound and enveloped in an elastic bandage; the careful closure of both the uterine and the peritoneal cavities, where both were opened, was insisted on; Mr. Thornton pointed out the great difficulty of rendering the uterine cavity aseptic; and the use of the elastic ligature for the pedicle was advocated. The antiseptic method had many warm supporters, but Dr. Keith stated that with it, after having a succession of eighty successful cases, he had five deaths in the next twenty-five cases, two from carbolic poisoning and one from septicæmia, and two from acute nephritis. On account of this mortality, and of the very frequent high temperature the evening after the operation, he had abandoned the spray in all operations, and had had one death out of twenty-seven ovariotomies without the antiseptic treatment. Professor Czerny related a successful case of excision of the pylorus; and Mr. Tait referred to his experience in abdominal surgery, to show how the domain for surgical interference is extending to pelvic abscesses, etc. Of all the many surgical improvements of the last thirty years, there is none that can take a higher rank than this, and it appears that we have not yet learned the full extent of its value, or appreciated the degree to which the peritoneal cavity can be interfered with without a disproportionate danger.

The question of surgical interference with the kidney was raised and discussed by Czerny, Baker, Barker, Barwell, Lucas, Martin, and Langenbeck. All had cases of nephrotomy, nephro-lithotomy or nephrectomy to relate, and Dr. Martin stated that he had seven times removed a painful floating kidney, and once a malignant tumor of the kidney, with five recoveries in all. To aid the diagnosis of renal conditions, Mr. Barker suggested that in stone the kidney should be exposed from the loin and carefully explored with a needle, and the President considered the suggestion valuable. The difficulty of deciding whether pyelitis or suppurating sacculated kidney is unilateral or bilateral is a strong argument against performing such a severe operation as nephrectomy without being sure of removing the entire disease, and until diagnosis has advanced the application of this

treatment, it must be very limited. The excellent cases recorded show the feasibility of the three operations named above, and, as far as they may be taken as a guide, prove that nephrectomy is not more dangerous to life than nephro lithotomy and nephrotomy. Three methods of removal of the kidney were described, the lumbar, the intra-peritoneal, and the abdominal extra-peritoneal; the first would seem to be at once the most difficult and the safest, but Dr. Martin states that in removal of the kidney from the front of the belly, the peritoneum falls together so completely, that it does not even require stitching. A decision on this point must follow the more accurate diagnosis of the precise conditions in which removal of one of the kidneys is justifiable; it is on this point that most light is required at present. No detailed information was given of the physiological effects of removal of one kidney.

The next discussion was raised on the recent advances in the methods of extracting stone from the bladder of the male, and was opened by Sir H. Thompson, in a very able paper, continued by Professor Bigelow, and joined in by most of the leading authorities on this subject. The question naturally divides itself into two—lithotomy and lithotrity. As to the former, the only novelty proposed was the use of the thermo-cautery instead of the knife, in both perineal and, especially, suprapubic lithotomy, with the view of avoiding hemorrhage and having a dry, non-absorbent wound. The objections to this plan are so obvious—viz, the formation of a deep slough, the inability to follow the exact steps of the operation and regulate the amount of damage—that they only require to be stated. More valuable were Mr. Teale's remarks on the improved results of lithotomy in late years, owing to the avoidance of septic diseases, and the greater deliberation in the extraction of the stone—a point most important always to bear in mind, for in this case rapid operating is not only uncalled for, but mischievous. Dr. G. Buchanan advocated the use of the rectangular staff, which makes the operation easier and safer; but Professor Spence, while praising it, pointed out that in cases of very large prostates its point may not reach the bladder, and so lead to trouble. Sir H. Thompson spoke hopefully of the plan of crushing a very large calculus *in situ* by powerful forceps before opening the bladder, and recommended a combination of lithotrity with an opening into the membranous urethra from the perineum in cases of greatly enlarged prostate with irritable bladder and urethra.

As regards lithotrity, it was admitted by all that Prof. Bigelow had not only introduced a new principle into the operation by insisting on the axiom that the bladder was more tolerant of instruments than of sharp fragments of stone, but that his practice was also an improvement. Out of ninety-one cases operated on after this plan by Sir H. Thompson, eighty-eight recovered. Beyond this, however, there was no agreement. Bigelow insists on the value of large instruments even for small and moderate-sized stones, and that his operation is suited for all cases of lithotrity. Sir H. Thompson is as earnest in contending that the instruments should be proportionate to the size and hardness of the stone, and never larger than necessary; while Mr. B. Hill thinks that there are many cases in which the old operation is better, the danger of injuring the deeper parts of the urethra in men of middle age being important. Mr. Teevan spoke of the entire absence of chronic cystitis after Bigelow's operation. As to whether the new operation has enlarged the field of lithotrity, Mr. Coulson spoke of having removed four ounces of stone at one sitting. Sir H. Thompson showed the débris of large stones thus removed, and the results of Bigelow's practice are well known; but Mr. Teale and Dr. Buchanan concurred in the belief that, except to the practiced lithotritist, such was not the case, and that the lithotrite could not be used with safety for a larger stone now than formerly, and that whenever in doubt, it was safer to litho tomize. Professor Bigelow showed his latest improvements in the lithotrite—a new simple catch, and in the exhausting bottle, the chief features of which are a hose attached to the top of the bottle to admit water, or give exit to air during the operation, and a new valve and trap at the junction of the catheter and exhausting tube, to catch all the dust and fragments that in the ordinary way pass to and fro in the tube, and so delay the evacuation. This is no doubt a direction in which improvement is needed, but it is a question whether this trap, or Mr. Clover's original simple contrivance be the better for the purpose. There is much in Mr. B. Browne's observation of the great desirablity of keeping surgical apparatus as free from complications as possible. Dr. Bigelow, at the close of the meeting, gave a very interesting demonstration of the use of his apparatus, and it must have been gratifying to him to find that among the differences of opinion on other points, all were agreed in ascribing to him full credit of his principle of practice, both for its novelty and its value.

To M. Ollier, was allotted the task of introducing the subject of Excision of Joints, and he laid stress on the value of the subperiosteal plan, and stated that when carried out, even the cartilage might be regenerated in the new joint; he preferred early to late excision. M. Rocher, of Berne, followed with his statistics of sixty four cases of excision, with six deaths; he has recently tried to obtain a movable knee-joint after excision. Mr. Newman related a very excellent case where drainage of the joint was successful in acute arthritis subsequent to disease of the head of the tibia. But the real question at issue was as to the desirability of the operation early or late in the disease. Mr. Bryant, Mr. Heath, and Mr. Marsh strongly advocated a limited use of the operation; they regard the disease as local, and as locally curable, and therefore consider excision out of place except after all other methods have failed and in advanced disease. On the other hand, all were agreed that in such cases the results of excision have been most disheartening; and for this reason and also because of the shortening of the total period of pain and illness, and of the connection of the local disease with general disease, others, Messrs. Croft, Teale, Treves and Barton recommend an early or very early resort to the operation. The arguments urged on each side are no doubt well

w rthy of full consideration; it is, however, for those who operate to demonstrate the necessity for the practice. It is impossible not to see that those who urge operation very early will be led to operate when not necessary, as errors in diagnosis will occur to all; and further, such a practice will tend to draw attention from the main requisite—*a mode of cure of the disease.* Perhaps hardly sufficient stress was laid upon the excellent results given by free incision into chronically diseased joints. We should mention that Dr. Sayre showed drawings of a case of singularly perfect reformation of the hip-joint after excision; new cartilage was present.

The most important and best sustained of all the discussions took place on the causes of failure in obtaining primary union in operation wounds, and on the methods best calculated to secure it. Mr. Savory opened it in a very eloquent and philosophic speech, pointing out that primary union was most likely to occur when fresh surfaces are brought together in their natural state, and maintained so without disturbance. The chief cause of the failure he believed to be "meddlesome surgery," and essential principles were rest, cleanliness and asepsis, which admit of almost endless variation in detail. He asked, when a wound was septic or aseptic, was fever, or pus, or only smell to be the criterion? Defending his Cork statistics, he claimed that they had not been surpassed, though equally good results were obtained by many different plans of treatment, the actual process of healing being primarily independent of them all. Mr. S. Gamgee followed, and showed the antiseptic absorbent cotton pads he has used with success. As one proof of their antiseptic power, he showed a piece of meat which had been lying between two of them, but exposed to the air for fifteen seconds every day, and was perfectly sweet at the end of twelve days. The principles he laid stress upon were perfect dryness of the wound, thus removing one of the conditions of putrefaction, rest and infrequent change of dressing, circular compression, and suitable position, with the use of antiseptics as an important adjunct. Dr. Humphry spoke of the importance of a clean cut wound in healthy tissues, very accurate apposition of the edges and surfaces with very careful closure of all bleeding vessels. The air acting injuriously both as a direct depressant of the vitality of the tissues, and through agents floating in it, it was only wise to use some form of antiseptic to purify the air. For Professor Verneuil, the disposition of the wound and of the patient are *the* great factors in the healing process. Professor Esmarch's statistics of his own practice are so remarkable, that they must be given in full. In 398 great operations (six deaths) 85 per cent. of the cases cured healed by first intention, with one dressing, in 15 per cent. the dressing was renewed; and this ratio had improved of late. There were 146 excisions of large tumors, 40 excisions of mamma and axillary glands, 14 castrations, with one death from pericarditis and old syphilis, one from apoplexy, one from fatty heart. Of 51 major amputations (thigh 18, leg 27, arm 5, forearm 1), one died from shock and hemorrhage, and one from delirium tremens. There were 61 resections; 11 exarticulations; 26 necrotomies; 13 nerve-stretchings, one for tetanus, which was fatal; 8 hernias, 21 large cold abscesses; 12 large wounds; 49 compound fractures. The cases were all dressed with pads soaked in iodoform and absolute alcohol (10 per cent.), fastened on by an iodoform bandage, over that a large pillow of jute and gauze, a moist bandage, and over all an elastic bandage. Professor Volkmann thought that all suppuration is septic, and that personal peculiarity in the main had nothing to do with the healing of a wound. Other evidence was offered and opinions given which only corroborated the above, and supported various ways of carrying out a dry dressing, with rest and compression combined with antiseptics, as advocated by Mr. Gamgee, whose labors in this direction have perhaps not been sufficiently recognized. Professor Lister wound up the discussion. In reference to Dr. Keith's experience, he stated that he had dissuaded him from using antiseptics in the first instances; in such an operation there is abundant room for effusion and means of absorption, while carbolic acid both increases the one and lessens the other; but on the whole he thought antiseptic ovariotomy had been successful. Referring to the experiments detailed at Cambridge, which showed that diluted septic poison may be added without effect to blood serum, though not to dilute blood serum, he further recited more recent experiments which showed that blood-clot in the body is still less favorable to the development of organisms. He expressed his belief that it is "solid bits of dirt" that are the deleterious agents, and that possibly too much attention has been paid to the finest particles floating in the air. His own results, however, were so good that he shrank from giving up any one of the details of the treatment by which he obtained them, although he quite admitted that he too might at some future time be able to say "*fort mit dem spray;*" at present he could not accept irrigation as a substitute for the spray. He denied that there was any ground for the charge that he disregarded the general condition of the patient or his hygienic surroundings. Were this true, his results being so good as admitted by all, what a strong argument it afforded to the efficacy of his merely local treatment! To give, in a few words, the general impression produced by the debate, we should say that the value of antiseptics was clearly recognized by all, that it was made evident that Professor Lister's aim may be attained by means other and simpler than his; that in particular the value of the spray is considered very doubtful; but more than all, that antiseptic treatment only answers one of the requirements of wound treatment, and that he only is a scientific surgeon who enlarges his views and practice to embrace all.

The final discussion was on the modification of syphilis in the tuberculous, gouty, and other constitutions, and was opened by M. Verneuil, who maintained that scrofula attracts syphilis to the organs it most commonly itself affects, and is apt to cause suppuration, but to remove the element of pain. Tuberculosis makes some tertiary syphilitic manifestations persist indefinitely. Mr.

Hutchinson had never seen a hybrid of syphilis and struma or tubercle or gout, nor had he been able to trace any modification of syphilis by these diseases, although the variations met with were no doubt to be explained by the idioscyncrasies of the patients. The antecedents of a patient did not enable him to predicate anything of the course of the acquired disease. In gouty patients he had often noticed severe bone and joint pains. He thought, however, that a severe form of ulceration of the face closely resembling lupus was to be accounted for by the influence of struma on inherited syphilis. Dr. Bennett knew of no modifications of rickety, gouty, or other bone changes that could be traced to syphilis, and he referred to the absence of information on the syphilitic changes in joints. Dr. Drysdale spoke to the existence of syphilitic phthisis from gummatous change. But so far as the discussion may be taken as a criterion of professional knowledge no satisfactory evidence of syphilitic hybridism, or of marked modification of syphilis by any other dyscracia, has been demonstrated.

(To be continued.)

Editorial Department.

Periscope.

Cremation vs. Inhumation.

In a lengthy article on the subject of Cremation, published in the Chicago *Medical Journal and Examiner*, Dr. C. W. Purdy sums up his conclusions as follows:—

1. That the present system of burial is attended with danger to the living.
2. That abuses of the system are frequent, and at all times difficult to prevent, and sometimes become so serious as to result in overwhelming whole communities with pestilence and death.
3. That a residence near crowded grave-yards predisposes to diseases characterized by evidences of slow poisoning.
4. That the system of burial as now practiced is necessarily attended with enormous expense, which is an oppressive drain on the resources of the poor. The author asserts that in the United States alone, over $100,000,000 are expended annually for funerals.
5. That the general adoption of cremation would dispose of the dead rapidly at a nominal expense, compared with inhumation, and with entire sanitary safety to the living.
6. That a similar disposal of the decaying organic products of large cities would tend to diminish the whole class of zymotic diseases, which at present are the cause of considerably more than one-fourth of our death-rate.

A Case of Chronic Pleurisy in which Two of the Chief Diagnostic Symptoms were Absent.

The following report of a case presenting some interesting features, by Theo. Westmoreland, M.D., of Athens, Ala., we take from the Nashville *Journal of Medicine and Surgery*, for August, 1881:—

On June 5th, 1881, I was called to see a negro man, aged 27 years; his breathing hurried and his effort in talking was labored; he complained of pain in his left breast; his appetite had failed him. As to the history of the case, he said, near two years before he had pneumonia, since which time his general health had been failing, yet he was able up to a few days of my visit to labor on the farm. Examination by percussion revealed dullness over the entire area of the left pleural cavity. Auscultation revealed an absence of the vesicular murmur over the entire lung; examination by measurement showed no difference; there was no bulging of the intercostal spaces. Diagnosis—chronic pleurisy, with effusion in the left pleural cavity. Two days later, assisted by Dr. P. C. Gaston, with the aspirator, there was withdrawn one hundred and thirty ounces of straw-colored fluid from the left pleural cavity. The relief experienced was immediate and very satisfactory. The vesicular murmur retained, with ability to inflate the whole lung. A large blister was then applied over the surface of the left breast. He was ordered compound syrup sarsaparilla with iodide potash, three times a day. Whisky was ordered in small quantities, frequently repeated. A good nutritious diet was prescribed. His improvement has been steady. To-day his health is good; no pain. The remarkable points in the case were the absence of two characteristic signs of effusion—want of enlargement of the affected side, as revealed by accurate measurement, and no bulging of the intercostal spaces; also the large amount of fluid contained in the cavity, and his speedy recovery.

Nerve-stretching for Locomotor Ataxy

Dr. Charlton Bastian has recently delivered a clinical lecture, quoted in the *British Medical Journal*, at University College, on a marked case of locomotor ataxy, the symptoms of which he described very minutely. The patient was about forty years old, there was wasting of the muscles of the extremities, especially in the left leg and thigh; at length the movements of his legs became slow and jerky, after walking a few yards he would become exhausted and his legs would double up under him. Mr. Marshall cut down on the great sciatic nerve on the middle third of the right thigh and stretched it with his finger, pulling it twice upward from below, then twice downward from above; antiseptic precautions were employed. About five weeks later the right lower limb having markedly improved while the left remained as it was before the right sciatic nerve had been stretched, Mr. Marshall operated on the left sciatic in the same manner. Troublesome diarrhœa followed, but

seven weeks later, when the patient tried to walk, his gait was found to be much better, and tactile sensibility, previously impaired in the lower extremities, had become perfect. The first operation was followed, in seven days, by the disappearance of a constant aching pain in the hypogastrium, which did not return, though slight pain was felt in the lower part of the chest. In a less advanced case treated in the same manner the improvement was but slight. The wounds, in these cases, were slow to heal. Dr. Bastian does not attempt to explain the mode in which nerve-stretching acts, but if it is found to do good it should be practiced. The manner by which many drugs act specifically on many morbid processes is quite unknown, yet that is no reason for not continuing their use when they are known to be beneficial in disease, and the same principle now applies to nerve-stretching.

Porro's Operation and its Result.

In answer to some inquiries in reference to this operation, we extract the following facts from various contemporaries:—

In 1876, Professor E. Porro, of Pavia, first performed the operation which now bears his name and has become fairly established. The results were completely successful, both mother and child surviving. The operation, performed for the delivery of pregnant dwarfs with narrow pelves, has been briefly described as follows, in a recent valuable paper by Dr. R. P. Harris. "After the evacuation of the uterus, its neck is constricted until all hemorrhage is arrested, the organ drawn out and cut away, and the stump secured, like the pedicle in ovariotomy, in the lower part of the abdominal wound. The operation has in almost all instances been performed under the spray of dilute carbolic acid, and the Lister method of dressing and management strictly carried out. Drainage tubes through the Douglas cul-de-sac and the abdominal wound have also been employed, sometimes to the number of three or four, but in almost every case at least one through the cul-de-sac and vagina." The Müller modification, sometimes also called the "Rein and Müller method," is thus described by Dr. Harris. "Dr. G. Rein, of St. Petersburg, Russia, proposed, in 1877, that the uterus should be ligated to avoid all hemorrhage before it should be opened for the removal of the fœtus. Müller added to this the turning out of the uterus from the abdominal cavity by a long incision, before the ligature, and then evacuating it, so as avoid the risk of the entrance of its fluid contents into the abdomen, after which the operation is to be completed as in the Porro method." Dr. Harris, having collected a total of thirty six cases of Porro's operation, found that in seventeen cases the mothers, and in five cases the children had died; the others, nineteen mothers and twenty-six children, surviving. In the last twenty cases of his list there were twelve recoveries and eighteen children were delivered alive.

In a late publication, Professor Simpson gives the following case illustrating the operation:—

Mrs. B., aged 24, rickety, had had several craniotomies and still-born children. The internal conjugate diameter measured two and a quarter inches. She was anxious to have a living child, and accepted the proposition of delivery by Porro's operation. The operation was performed under carbolic spray. The abdominal incision was 14 centimèters long. The child was extracted while the uterus was *in situ*. The child was living, and at once began to cry. The uterus contracted on the placenta, which was not removed. A stout piece of whipcord, made antiseptic, was passed round the broad ligaments and cervix uteri, drawn tight, and firmly knotted. The broad ligaments and Fallopian tubes were then ligatured, as well as the isthmus uteri. The pedicle contained three ligatures; one controlling the ovarian arteries and venous plexuses on each side, a third embracing the isthmus uteri and uterine arteries. The uterus was then amputated at a distance of 1.5 centimèters above the ligatures. The whipcord ligature was removed. There was no bleeding from the stump. The ovaries were cut away last, and the whole surface of the stump secured with the Paquelin cautery. There was no escape or exposure of the intestines. The peritoneal cavity was carefully sponged out. In sponging the pelvic cavity, the central ligature was loosened, so the uterine stump was transfixed and ligatured again. The cautery was reapplied. The abdominal incision was closed with eight silkworm gut and four horse-hair sutures. The patient died on the the fourth day after the operation. The *post-mortem* examination showed a considerable quantity of serous exudation and lymph in the abdomen, which was distended. The abdominal wound was healthy looking, and adhesion had taken place along the whole line of incision. The intestines were matted to the pedicle with recent lymph.

Reflex Neuralgia Caused by Foreign Body in the Ear.

The following report of a case by Dr. C. F. Arney, of Altoona, Pa., we take from the *Medical Summary*, for July, 1881:—

Sadie C. came to me July 25th, complaining of a very severe pain in her left ear and temple, paroxysmal in character, shooting from the ear to temple, and sometimes as far as the forehead. The pain usually came on as soon as she arose in the morning, and continued until she would lie down, when it would at once cease. She also complained of a sensation of fullness and impairment of hearing in her left ear. She has had more or less pain in her ear ever since she can remember. Her last attack commenced about three months ago, and has continued about the same ever since.

With the aid of a speculum, I saw the ear was filled with hardened cerumen, which I at once removed, by means of a syringe and warm water. After the wax was removed I noticed a button sticking transversely in the external auditory meatus, so tightly that I was unable to remove it with a syringe, so I passed the hooked end of Prof. Gross's ear scoop behind it and drew it out, to the great surprise of my patient, who said, "I do not see how that ever got in there." I concluded, from the history of the case and size of button, that it had been in the ear for a long time.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

The following pamphlets received:—

——"The Functional and Morphological Relations of the Cerebellum." By Dr. E. C. Spitzka. Reprinted from the Chicago *Medical Review*, July 5th, 1881.

——A paper on the question of "Axillary or Ischiatic Support in the Treatment of Joint Diseases of the Lower Extremities." Read before the New York Academy of Medicine, June 16th, 1881, by Dr. W. B. Judson, of New York, and reprinted from the *Medical Record*, July 2d, 1881.

——Announcement of the Twenty-first Annual Course of Instruction at the *Bellevue Hospital Medical College*, New York (Session of 1881–82). The Collegiate Year embraces a Winter session and a Spring session. The Winter session for 1881–82 will open on Wednesday, September 21, 1881, and close in the latter part of March, 1882. The recitations, lectures, and clinics for the Spring session will begin in the latter part of March, 1882, and end about the middle of June.

——"Thoughts upon Vivisection, with Reference to its Restriction by Legislative Action." By Dr. George Hamilton. Extracted from the *Transactions of the College of Physicians, of Philadelphia*. This paper is valuable in so far that it comes from a calm and dispassionate physician, who, apparently, does not by any means undervalue the practical results derived from vivisection, yet shrinks from its practice, and it will thus have the effect of calling out its defenders to protect the interests of science. We believe the cruelties of the slaughter house require more legislative restriction, and if it were not for the fact that philanthropists often have as keen an appetite for delicious roasts as the barbarous physiologists, the butcher trade would soon be declared unlawful.

BOOK NOTICES.

Transactions of the College of Philadelphia. Third Series. Volume the fifth. Philadelphia: Printed for the College, and for sale by Lindsay & Blakiston. 1881. Cloth, 8vo, pp. 124.

The larger portion of this volume is taken up by the memoirs of Dr. George B. Wood, Dr. Isaac Hays, Dr. John Marshall Paul, Dr. James Aitken Meigs, Dr. Thaddeus L. Leavitt, Dr. John Neill and Dr. Isaac Ray. The remainder is taken up by the following papers, of some of which we have previously given abstracts in the Reporter: "Foot-binding in China," by Dr. Robert P. Harris; "Account of a case in which Heart-clot Occurred as a Co sequence of Uræmic Convulsions and Tumors in the Heart," by Dr. Arthur V. Meigs, with remarks upon the preceding paper, by Dr. John B. Roberts; "Report of the Committee on Meteorology and Epidemics for the year 1878," by Dr. Richard A. Cleemann; "Case of General Hyperostosis," by Dr. James H. Hutchinson; Cases of Starvation Fever," by Dr. J. M. DaCosta; "Report of a Case of Diabetes Mellitus, in which double Cataract existed, death occurring three days subsequent to an operation of extraction," by Dr. J. Ewing Mears; "Report of the Committee on Meteorology and Epidemics, for the year 1879," by Richard A. Cleeman; "Thoughts upon Vivisection, with reference to its Restriction by Legislative Action," by Dr. George Hamilton, with remarks upon the preceding paper, by Dr. J. C. Morris. Papers so numerous and on subjects as varied as they are important, evince activity and labor from which great results may be expected, among the fellows of the College.

Landmarks, Medical and Surgical. By Luther Holden, Ex-President, Member of Council and Member of the Court of Examiners of the Royal College of Surgeons of England; Consulting Surgeon to Saint Bartholomew's and the Foundling Hospitals; assisted by James Shuter, M.A. Camb., F.R.C.S., Assistant Surgeon to the Royal Free Hospital, etc., etc. From the Third English Edition, with additions by William W. Keen, M.D., Professor of Artistic Anatomy in the Pennsylvania Academy of the Fine Arts, etc., etc. Philadelphia: Henry C. Lea's Son & Co., 1881. Cloth, 12mo, pp. 148.

To the original work by Holden, which we reviewed on page 267, Vol. xlv of the Reporter, numerous additions—all enclosed in brackets—have been made by the American editor, who for the past twelve years has employed this method of teaching what he calls "Clinical Anatomy," using the living model as the chief means of illustration. In this edition three illustrations have been introduced (the original work contained but one), and notwithstanding the opinion of the English author that they would detract from the usefulness of the work, we cannot but think him mistaken. Certainly the diagram and table on page 60, showing the approximate relation to the spinal nerves of the various motor, sensory, and reflex functions of the spinal cord cannot but add to the value of the work.

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PHILADELPHIA, PA.

THE INCREASING PREVALENCE OF MALARIA.

There is a widespread belief among the public that malaria—paludal miasm—is decidedly on the increase in many parts of the United States. Forty years ago Staten Island was a healthy place to spend the summer; now it is notorious for the severe agues prevalent. A score of years ago chills were next to unheard of along the Sound in Connecticut; now they prevail with increasing frequency every autumn. Many valleys in New Jersey, New York, Pennsylvania, and Delaware, have for the first time witnessed malarial cases of local origin within a decade. In Philadelphia, it is the opinion of some physicians who have been in practice for many years that malarial forms of disease are obviously on the increase.

These facts add much to the interest with which the questions relating to malaria will be studied. Nor do they exhaust its interest. The malarial poisoning presents itself under protean forms, and often is the active cause of disease, where it is not suspected. Thus, in surgical relations, at the last meeting of the French Association for the Advancement of Science (April 1881), there was presented a paper by Professor VERNEUIL, on "The Surgical Aspects of Malaria." M. VERNEUIL thinks that the baneful influence of this poison is not sufficiently recognized by operatives. It may give rise to a number of apparently spontaneous external affections; it may unfavorably modify the progress of intercurrent or pre-existent surgical diseases; it may arrest or delay the healing of wounds, giving rise to complications of different kinds, which render the prognosis more than usually unfavorable. Traumatism in its turn reacts upon malaria, bringing it out, or reawakening it in individuals in whom it would otherwise have been dormant.

There are various lesions of the stomach, duodenum and liver, which arise from malarial poisoning, and cannot be brought to a favorable termination unless this is recognized. There is no doubt but there is a hybrid form of fever, to which the term *typho-malarial* has been applied, closely allied to enteric fever *plus* a malarial element, and that the symptoms and lesions are indicative of both poisons. No one can doubt this, who has had much to do with invalids from or in hot climates, and has had an opportunity of seeing how the malaria in their systems modifies the symptoms and progress of other affections from which they may be suffering.

As for the investigations into the efficient cause of malaria, we may say nothing definite is yet known. Any one who has studied this difficult subject knows the great variety of conditions and soils where this poison is found. Granting that the lowly organism, to which the name of *bacillus malariæ* has been given, exists in the soils examined by KLEBS and TOMMASI-CRUDELI, and has been found in the organs of those who have died of malarial fevers, is this *bacillus malariæ* to be found in some of the arid soils in the tropics, and elsewhere, notoriously fertile in malarial fevers? This much seems certain; up to this date it has been searched for in vain in the malaria producing soil of lower Bengal. We know that the

fever-producing rotten granite of Hong Kong and other places is permeated by a fungus; but is it the *bacillus malariæ*? The question appears not to be in a more advanced stage of proof than the well known theory of Dr. SALISBURY of Ohio, who maintains that agues are not produced by any poison of telluric origin, but by the introduction into the system of cells and spores, emanating from certain plants called *Palmellæ*, which are of the lowest vegetable organisms. Dr. SALISBURY gave the name of "ague-plants" to them, and like KLEBS and TOMMASI-CRUDELI, demonstrated their presence in the organs of men affected with malarial fevers. It has always been thought a sufficient answer to Dr. SALISBURY'S theory, that such fevers prevail in regions where his "ague-plants" have no existence. It remains to be demonstrated that the theory of KLEBS and TOMMASI CRUDELI is not open to the same objection.

In reference to the increasing distribution of malaria, it is worth noting that water is often the vehicle by which the malarial poison reaches the system, and that it is often charged with malaria at points distant from the places where it comes to the surface and is used. Thus, it happens that soils are often reputed malarious, when, in reality, the unhealthiness is due to the fact just stated.

Possibly also the poison, whatever it may be, may be carried by the winds. Various observations seem to show this. Persons living on the lee side of a marsh (with reference to the prevailing winds) suffer more than those to windward of it. The topic is one which seems to call for special investigation at the present time.

SECTIONAL ADDRESSES AT THE INTERNATIONAL MEDICAL CONGRESS.

The addresses before the various Sections of the International Congress were, as a rule, fully equal to the importance of the occasion. They were able embodiments of the questions which most interest workers in the respective Sections before which they were delivered. One point, to which we have previously referred in speaking of the proceedings of the Congress is also conspicuous in these addresses, and that is, the almost entire absence of any application of medical science to the practical treatment of disease. Although the main business of the physician is precisely this, it seems *infra dig.* for any one aspiring to a high position in the profession to speak of it! Such, at least, is the explanation which occurs to us to explain this anomaly.

Proceeding on the same plan as we did last week, we shall give brief notices of the various addresses before the Sections. That of Anatomy was by Prof. W. H. FLOWERS, F.L.D., F.R.S., etc. Speaking of the teaching of anatomy he said:—

Anatomy is still taught in all our medical schools, certainly in this country, and I believe elsewhere, as if the body of man was something which stood alone and apart from all other entities; instead of being but a highly specialized and peculiarly modified form of a vast array of structures of similar organization. If any generalizations are permitted, or allusions made to other modifications of such organization, they are only superadded, as a sort of additional burden of knowledge, which may or may not be learned; but they are never made the basis upon which the whole of the study depends—the key, or index, as it were, without which a reasonable and intelligent view of the subject cannot be obtained.

Though thus indicating the fact that the study of human anatomy has still a great future before it. I am not sure that the time has yet arrived, at all events in the ordinary course of teaching, to initiate the great change that must inevitably come. We may take warning by the vacillating progress of biological ideas during the last few years—by the epochs of architypes and vertebral theories through which we have passed—and not feel quite satisfied that we are yet in a position to undertake a complete remodeling of our anatomical teaching on a permanent basis. There is still vast room for exploration upon the border land of human and so-called comparative anatomy, both in the accumulation of new facts, and of new ways of interpreting those facts. The individual variations met with in the human body, which are now receiving so much attention in the anatomical schools, still present a wide field for research; and their records should not only be greatly added to, but require collation, comparison, and reasoning upon. The value of such observations increases with their number; relative frequency being the principal element in estimating their importance. The study of such variations as have acquired permanency by successive inheritance, or the so-called race-characters, might well engage an army of careful and conscientious workers. But how few, in this country at least, follow the example of persistent and patient concentration shown by some of our brethren in Germany and France.

A truly scientific human anatomy will not have been accomplished until the essential nature of

each structure of the body has been made manifest by tracing it through all its modifications in other animals, in all races of man, and in its individual variations in our own race. Our endeavor should be to show where it first appears in the series of organized beings, where it exists in a rudimentary condition, and where it is more fully developed, and has a more important function than in man; to show, in fact, where it came from, how it came, and why it has assumed its present form.

Prof. FLOWERS then proceeded to describe the Hunterian Museum of Anatomy now in the possession of the Royal College of Surgeons. John Hunter devoted thirty years of his life to preparing it, and the whole of his large income. He was estimated to have expended $350,000 upon it, and at his death this immense collection was the sole property he left behind. It was bought by the Government for $75,000. The specimens in it are many of them a hundred years old, but in perfect preservation, and Hunter's dissections have never been surpassed.

The address before the Section of Pathology was by Dr. SAMUEL WILKS, F.R.S., etc. He spoke as follows about the relations of pathology to physiology:—

Pathology has received various definitions, the most common being that which contrasts it with physiology; for, as the latter is regarded as the science of healthy organic life, so the former has been held to be the science of the unhealthy, or of the abnormal course of life contrasted with the normal. This division of vital action into normal and abnormal is true in a superficial sense, and might be made theoretically to stand as a definition; but it is by no means applicable to our practical science of pathology, nor can it be made of any value as an expression of diagnostic knowledge in treating the thousand ills to which flesh is heir.

In the first place, it must be admitted that the changes which occur in every organic structure, as years roll on, are to be regarded as normal, unless we take an imaginary or ideal standard of a being living in some former golden age, where nought was known but perpetual youth, and regard every departure from this as morbid. Although we do not frame such a picture to ourselves, but know that the various changes in the bones, the cartilages, the lungs, the brain, and other parts, which take place in age, are in harmony with the dictates of Nature, yet how often are we called upon to treat these changes as forms of disease? They are, however, no more unnatural or pathological than the sere and yellow leaf which falls from the oak in autumn.

If, however, these senile changes occur prematurely, they will then be abnormal, and may be strictly regarded as morbid. Herein is one form of a pathological condition with which we have to deal—a premature decay arising from the various causes which bring the organism to an end, either from their operating with unusual force, or from some inherent weakness in the body, which is unable to moderate their action. Now, if all these potent influences, instead of driving the mechanism too quickly, and so bringing it prematurely to an end, concentrate their forces upon one organ only, that organ would become, in ordinary parlance, diseased; but the process there set up may be of exactly the same nature as time would otherwise have produced. In comparatively young persons, for instance, we meet with fibroid and fatty changes in the heart and vessels, distention of the air-cells, alterations in the structure of bones and joints, which resemble in every respect those which age would have ordinarily induced. Therefore, many of the conditions which we call disease seem nothing more than the result of the concentration on a particular organ of all those agencies which, under ordinary circumstances, bring about senile changes. These changes, therefore, although senile in character, are abnormal, and therefore may be rightly regarded as pathological.

The pathologist, therefore, cannot but regard the body, in the first place, in its physiological relations with its surroundings, and mark the alterations which time produces. The physiologist is aware that the production of force must be accompanied by loss elsewhere, seeing that gain and loss are equal; and, therefore, in observing organic life, he must regard the destructive processes as well as the formative. Life seems to depend upon changes continually going on in relation with the atmosphere in which all living bodies are steeped. The burning of the fuel in oxygen supplies the forces necessary for living processes; we, therefore, although alive, are constantly being consumed.

Pathological changes, he maintained, obey the same laws that we are familiar with in other biological processes, and it is part of the future of pathology to demonstrate these identities. Hence:—

If the specific disease be due to organisms, and the hypothetical *contagium vivum* be a reality, it must be subject to the same laws as other organic matter; and, if the doctrine of evolution be true, it must have numerous relations with families of its own kind, and perhaps with others which are now obsolete. This idea has occupied the minds of several medical men in this country, and it will no doubt further fructify in their hands (Dr. Airy, Dr. Thorne, etc).

A highly contagious disease prevailing in a particular locality may be exhibiting the differentiation of some more simple, less virulent, and widely spread disorder. For example, a slightly contagious epidemic sore-throat might, in course of time, develop into a more virulent one, until it culminated in diphtheria; and, if this disease be due to an organism, the latter might have found a more genial soil for its development, or be altered by propagation and time, so that new properties might at last have been added to it. There may be a progressive development of in-

fectiveness. Then, again, the doctrine of natural selection might obtain in the fact of some specific diseases remaining among us, while others have become obsolete. The same law, too, if allowed its full operation, might tend still more than it does to the subjugation of many hereditary diseases; for, as these appear in youth, and often cause death, they would fade away by a process of self-destruction. As regards the specific diseases, we see again how the most susceptible persons would be struck out by the poison and the least susceptible remain, so that the poison would be modified in its virulence. We witness this fact in the more moderate characters of the exanthemata in all civilized nations, in comparison with the more profound effects produced by them in nations where the diseases had been hitherto unknown, as, for example, the fatality in the Pacific Islands of our comparatively mild British measles.

The old definition that pathology is a deviation from the healthy standard is no longer tenable, and fails before the present wider generalization of that science.

The Section of Medicine was addressed by Sir WILLIAM GULL. Pathology, physiology, and diagnosis were the principal themes he referred to. In regard to the relation of sciences he said:—

Some have prophesied that the advancement of the biological sciences will leave medicine a barren waste in their midst; but such a result, in the natural course of things, cannot happen. There is an indissoluble union between all the sciences, which, for medicine especially, human interest will ever strengthen. The past history and the present state of our profession give us abundant assurance of this. It is not too much to assert that the study of medicine will, for all time, attract a large proportion of the best thinkers and workers of the world. It has ever been so; and what has been, doubtless shall be in the time to come. Besides, almost every germ of scientific thought has sprung in some way from medicine; and I have only to remind you that some of the most illustrious physiologists and pathologists of to-day are members of our own profession. And if, from the delicacy, intricacy, and the demands made upon all the powers of the intellect by the extent and character of their investigations, they have, as it were, turned aside from immediate clinical work, they are still so much in union with us that we daily at the bedside avail ourselves of the results of their labors, and gratefully acknowledge that they are our ministering angels, ascending and descending upon the ladder of science in the furtherance of all good practice.

On the general theories now prevailing in explanation of physiological action, he observed:—

It may be not uninteresting to notice how "solidism" is widely reasserting itself in the science of living things; not as an *à priori* system, but through the progress of knowledge. The proximate conditions of pyrexia are no longer vaguely referred to nerve, but to definite nerve centres; hyperæmia and inflammatory changes to sympathetic lesions; abnormal chemistry to the great respiratory centres; the strange conditions of Addison's disease, with its characteristic pigment, to the suprarenal bodies, themselves probably but nerve centres, and related, at least by structure, to the system of the pituitary gland; epilepsy, supposed in Hippocratic times to be due to extraneous maleficent spiritual influences, is traceable to apparently trifling changes in a few gray nerve-cells. The specific fever-processes notoriously owe much of their character and intensity to the nervous system. Their relation to time, their occurrence only in warm-blooded animals, the great mortality they cause through nerve exhaustion, and the immunity they leave behind them, indicate that, whatever may be the nature or mode of operation of their several poisons, it is by implication of nerve-elements that fever obtains its chief clinical characteristics.

Further, in the advance of "solidism," what can interest us more than the recent investigations on contagia? Perhaps no more important step has been made in practical pathology than the proof that some, at least, of these contagia are organized solids. This discovery, which it has tried the patience, experimental skill, and scientific criticism of the best observers to establish, has brought us at length within view of that which has hitherto been so mysterious. To have been able to separate, though imperfectly, the contagious particles; to have come to the conclusion that no fever poisons are soluble—is a hopeful preliminary towards forcing them to yield up the secret of their nature.

If "solidism," as a theory of organic processes, wanted confirmation, we could point to nothing more striking than the present established views on putrefactive changes, and to the amazing fact that the normal textures and fluids of the body resist decomposition unless invaded by microscopic organisms.

May we not hereafter find that all organic chemistry is the resultant of mechanical changes in organic solids? all Nature, in fact, as Newton asserted, mechanical, but the Great First Cause? Of this we are admonished on all sides. Histology, physiology, pathology, clinical medicine, teach us more and more the supreme importance of *form* and *relation*.

The Surgical Section was opened by Mr. JOHN ERIC ERICHSEN, F.R.S., etc. He reviewed, seriatim, some of the more important subjects that had been set down for the consideration of the Section. He expressed some doubt as to the propriety of "surgical audacities" on intra-peritoneal tumors, now so fashionable. Of operations for stone he said:—

In lithotomy we see much of change, possibly something of novelty, but not so certainly anything of real progress. Have we, indeed, advanced one single step, either in the perfection or in the results of that operation since the days

of Cheselden, of Martineau, or of Crosse, not to mention the names of more recent, but equally illustrious, surgeons and successful operators? The revived median, the combination of it with lithotrity, the suprapubic, whether done antiseptically or not, have certainly not been very encouraging in their results, and can scarcely claim to be considered in the light of an advance on the old lateral operation, in skillful hands. But yet we must admit that these methods of lithotomy may deserve this consideration; that possibly, in some forms of calculus, and in certain conditions of the urinary organs, a wise eclecticism may be exercised in the choice of one or other of them. In lithotrity, however, it is probable that a great and real advance has been made, and certainly it is undoubted that a complete revolution has been effected by the enterprise and skill of one of our American brethren; for it cannot be questioned that "Bigelow's operation" has completely changed the aspect of lithotrity, and there is every reason to believe that it constitutes one of those real advances in a method which marks an epoch, not only in the history of the operation itself, but in the treatment of the disease to which it is applicable.

Of course, the great subject of the proper treatment of recent wounds, could not be overlooked in such an address. He says of it—

From the earliest dawn of human intelligence, the attempt to cure a wound must have suggested itself to man; and yet, at the close of the nineteenth century we are still discussing the best methods of doing this, and the causes of their failure. There is still difference of opinion and of practice among surgeons, not only as to the comparative advantages of the "open air" method, and that in which all atmospheric contact is carefully guarded against; of the "dry" and of the "moist" system of dressing; as to whether the "antiseptic method" in a modified form suffices, or whether the more elaborate system of local treatment before, during and after an operation, which has been devised by the skill and worked out by the unwearied labor of Lister, be essential in all cases of operation wound. Not, of course, for its primary union—for this may be obtained by any and every of the methods mentioned. If it be contended that this system is necessary for the safety of the patient, and the due healing of the wound in some cases, has it been proved to be equally essential in traumatic lesions of all tissues, of all organs, and of all regions? These are questions that may well deserve the consideration of this Section. But there are others of a yet wider character that must also engage our attention in any discussion on the best methods of securing primary union in wounds, for it is impossible to fail to recognize in the general constitutional state of the patient, a most important factor in this direction; and we should be taking a narrow view of this many-sided question if we did not give due weight to the influence of those hygienic conditions which, if faulty, are inimical, or even destructive, to the due performance of those actions which are necessary for the maintenance of the organism in a healthy state, and for the proper nutrition and consequent repair of the tissues of the body. Is there no fear that, in some of the modern systems of treating wounds, we are in danger of expending all our precautions in the prevention of the local, and of ignoring the risk of a constitutional, infection?

The speaker then passed to the consideration of recent projects for the management of aneurisms:—

The treatment of aneurism is one of those great questions which, from an early period in the history of modern surgery, has occupied the attention of practitioners, and has undergone no little fluctuation. A few years ago, the battle between the ligature and compression appeared to have been decided in favor of the latter: but the invention of improved ligatures, made of various kinds of animal tissue, and applied with antiseptic precautions, has once more inclined the balance of professional opinion towards the Hunterian operation. But now, again, the practice of compression has received renewed strength from the employment of Esmarch's elastic bandage in the cure of certain forms of external aneurism; and it is for you to determine in what cases it can be used with advantage, and in what way a cure is effected by its means. For, in the treatment of aneurisms, as in that of so many other surgical diseases, the wiser and more scientific course is to follow a judicious system of selection in the method to be employed in each particular case, rather than to subject all to one unbending line of practice.

Chronic joint diseases, the permanence of syphilitic infection, and malignant tissues were other subjects to which he briefly referred.

The address on Obstetric Medicine, by Dr. Alfred H. McClintock, was a brief review of the history of the art, especially in England. It appears rather too local in coloring to suit the occasion, and does not offer anything which need be extracted.

The Section on Diseases of Children was opened by Dr. Charles West. He summed up in a few words some of the most important advances which this branch has gained during the last five and twenty years. Thus he says:—

The vague phraseology which served for years to conceal our ignorance, even from ourselves, has been to a great degree done away with. We talk no longer of worm fever, remittent fever, gastric fever, and so on, for under these various names we recognize the one disease, typhoid fever, varying in severity, but marked always by its own characteristic symptoms. Half a page in a hand-book was all that was to be found thirty years ago concerning heart disease in childhood, while at the present time the frequency of heart disease has been fully recognized, and it has been studied with as much care in the child

as in the adult. The various inflammations of the respiratory organs are no longer looked on as a whole, but each is referred to its proper class, and we distinguish lobar and lobular pneumonia, bronchitis and capillary bronchitis, and assign to each its proper place and its characteristic symptoms. Nor have our therapeutics lagged behind. I remember the hesitation with which, some forty years ago, my dear friend and master, the late Dr. Latham, decided on tapping the chest of a boy eight years of age, who was received into St. Bartholomew's Hospital on account of a pleurisy which had terminated in empyema; and the delight—the wonderment, almost—with which we regarded the successful issue of the operation in a child so young. A few months ago I communicated to the Medical Society of Nice the particulars of fifty cases in my own practice, where paracentesis of the chest had been performed at my desire, and several of you gentlemen could relate as many cases, or more. That once almost unrecognized disease, diphtheria, has been studied with the greatest care; its relation to membranous croup has been investigated; the close connection of the two has been demonstrated. I, for my part, should not hesitate to say their absolute identity has been established. Much light has been thrown on various diseases of the nervous system. That once enigmatical affection, the so called essential paralysis of infancy and childhood, has been shown (in the first instance by the researches of my friend N. H. Noger and his able coadjutor M. Damaschino) to be due to an acute inflammatory softening of the gray matter of the anterior columns of the spinal cord; and twenty-five recorded observations since that time attest the truth of their discovery. Though, strictly speaking, perhaps not a disease of the nervous system, the pseudo-hypertrophic muscular paralysis of Duchenne claims mention here as a new and important addition to our knowledge of the pathology of early life.

Mr. Erasmus Wilson, f.r.s., etc. opened the section on Dermatology with an address on the proper method in studying diseases of the skin, and suggestions for the extension of their study. We make the following extract:—

For therapeutical purposes all diseases of the skin might be assembled, if we except syphilis and diseases proceeding from local causes, under three heads, namely: diseases depending on disorder of digestion and assimilation; diseases depending on disorder of innervation; and diseases of nutrition. As an example of the first kind we might take eczema, with its multitudinous manifestations. As an example of the second we should have pruritus and prurigo; and as examples of the third, papilloma and fibrosis. But we cannot fail to recognize the fact that, practically, there is a greater or less blending of the whole. The pruritus of eczema belongs to disordered innervation; and aberration of nutrition may be accompanied with symptoms which appertain to both the others. Thus, in the lepra of Wilan, the psoriasis of modern schools, we have a disease which is due to altered nutrition of the skin, from defective organization of that structure. But as the nerve-power or life-power of the skin is insufficient to restrain abnormal function, so—capillary congestion constitutes a part of the disease; and the hypertrophous growth of papillæ and excessive production of morbid epidermis must be regarded as passive nutritive change or passive growth. In ichthyosis, with a starved condition of the skin as far as nutrition is concerned, we have an excessive papillary growth, an excessive accumulation in the shape of altered epidermis. But still more interesting illustrations of abnormal nutrition are evinced by excess or defect of pigment; by the substitution of a lowly for a more highly organized tissue, as in fibrosis, and by the exuberant proliferation of cell-tissue of low organization which is met with in the instances of tinea, of favus, and of epithelioma.

In the Section on Diseases of the Teeth, the address was by Mr. Edwin Saunders. As it contained little to interest the general practitioner, we pass to that of Dr. John Simon, delivered before the Section of Public Medicine. He opened with general remarks on the meaning and scientific method of State Medicine. He pointed out that experiment was the basis of scientific progress. It has already effected immense changes for the better.

Let me briefly refer to the fact that, during the last quarter of a century, all practical medicine (curative as well as preventive) has been undergoing a process of transfiguration under the influence of laboratory experiments on living things. The progress which has been made from conditions of vagueness to conditions of exactitude has, in many respects, been greater in these twenty-five years than in the twenty-five centuries which preceded them; and with this increase of insight, due almost entirely to scientific experiment, the practical resources of our art, for present and future good to the world, have had, or will have, commensurate increase. Especially in those parts of pathology which make the foundation of preventive medicine, scientific experiment in these years has been opening larger and larger vistas of hope; and more and more clearly, as year succeeds year, we see that the time in which we are is fuller of practical promise than any of the ages which have preceded it. Of course, I cannot illustrate this at length, but some little attempt at illustration I would fain make.

First, let us glance at our map. When we generalize very broadly the various causes of death (so far as hitherto intelligible to us) we see them as under two great heads, respectively, autopathic and exopathic. On the one hand, there is the original and inherited condition under which, to every man born, there is normally assigned eventual old age and death, so that, sooner or later, he "runs down," like the wound-up watch with its ended chain; and, as morbidities under this type, there are those various original peculiarities

of constitution which make certain individual tenures of life shorter than the average, and kill by way of premature old age of the entire body, or (more generally) by quasi senile failure of particular organs. On the other hand, as a second great mass of death-causing influence, we see the various interferences which come from outside; acts of mechanical violence, for instance, and all the many varieties of external morbific influence which can prevent the individual life from completing its normal course.

As regards cases of the first class—cases where the original conditions of life and development are such as to involve premature death (which in any such case will commonly show itself as a fault in particular lines of hereditary succession)—the problem for preventive medicine to solve is, by what cross-breeding or other treatment we may convert a short-lived and morbid into a long-lived and healthy stock; and this, at least as regards the human race, has, I regret to say, hardly yet become a practical question. But as regards cases of the second class, evidently the various extrinsic interferences which shorten life have to be avoided or resisted, each according to its kind; and here it is that the scientific experimenters of late years have been giving us almost daily increments of knowledge.

The speaker had a great deal to say against the vivisection act in England, which he believed to be a heavy detriment to the cause of science, and a great injury to the public welfare.

The Section of Military Surgery and Medicine was opened by Prof. C. Longmore, C.B., etc., in an address of considerable length, in which he gave an explanation of the system by which help is arranged to be afforded to the wounded army troops on active service, according to the existing regulations of the British army.

In the Section of Materia Medica and Pharmacology, Professor Fraser, F.R.S., delivered the opening address. The earlier portion of it was a historical review of the progress of these related departments. He also dwelt on the experimental method and its value, quoting various examples, particularly the action of digitalis and anæsthetics.

The former substance was introduced into practice by Drs. Cullen and W. Thormic. Towards the end of the last century, and, therefore, answering to the inauguration of the experimental method, and to the foundation of pharmacology as a science, it was introduced as a remedy for dropsy; and on the applications which were made of it for the treatment of that disease, a slowing action upon the cardiac movements was observed, which led to its acquiring the reputation of a cardiac sedative. Numerous observations were made on man by the originators of its application, by Dr. Sanders and by many other physicians, in which special attention was paid to its effects upon the circulation, but no further light was thrown upon its remarkable properties, with the unimportant exception that in some cases it was found to excite the circulation. It was not until the experimental method was applied in its investigation, in the first instance by Claude Bernard, and, subsequently, by Dybkowsky, Pelikon, Meyer, Boehm, and Schmiedeberg, that the true action of digitalis upon the circulation was discovered. It was shown that the effects upon the circulation were not in any exact sense sedative, but on the contrary, stimulant and tonic, rendering the action of the heart more powerful, and increasing the tension in the blood vessels. The indications for its use in disease were thereby revolutionized, and at the same time rendered more exact, and the striking benefits which were now afforded by the use of this substance in most diseases were made available to humanity.

The introduction of anæsthetics into medical practice has certainly produced more benefit than that of any class of substances. The insensibility which they produce is a condition which can be readily established by the most crude method of experiment, as it requires merely the exhibition of the substance and the observation of the effect; and this simple process of investigation is that by which their introduction was effected. Following upon this introduction and the wide extension of their employment, however, it was soon found that insensibility was not their only effect. They produced insensibility, but they also produced other actions, which assumed a grave importance, as they were occasionally sufficient to destroy life. The nature of these additional actions became, therefore, a matter of interest, for upon them apparently depended many questions governing the indications for the use of anæsthetics, and the treatment which should be adopted in order to avert or counteract their dangerous effects. No sufficient light, however, could be thrown upon them by the simple experiments which were sufficient to prove that these substances produce insensibility. By observing the phenomena presented by a patient in the anæsthetic condition, the mechanism by which the dangerous effects were caused could not be revealed. It could not even be determined whether death were produced by an action upon the brain, or upon the heart, or upon the respirations. The necessity for extending the investigations of their action to lower animals, in whom the experimental conditions could be controlled and varied, became obvious, and the researches which have already been undertaken by Hermann, Bert, Ferguson, Coates and McKendrick, have furnished much information with regard to those difficulties, that could not be solved by mere observation of effects in human beings. They have provided indications for forming an opinion of the relative dangerousness of many anæsthetics, of the class of cases in which each should be specially avoided, and of the means by which their dangerous actions may best be counteracted; and it is needless to remark that, if results of such importance can be obtained by no other means than by experiments upon the lower animals, the performance of such experiments is an imperative duty.

This naturally led him to criticise with great severity the opponents of vivisection and experiments on animals. He referred to the experience which had already been had of it, and expressed his conviction that the welfare of science in Great Britain imperatively demands the repeal of the obnoxious acts.

To us the matter bears a most serious aspect. To us it is as clear as the light of day, that the action of remedies cannot be ascertained otherwise than by experiments on the lower animals. If this method of research be denied to us, what means are we to adopt for increasing the resources of our art? How are the rich treasures which the enterprise of travelers and the never-ceasing discoveries of chemists place at our disposal to be applied, as hitherto they have in so many instances been most beneficially applied, to the treatment of disease? How are we to discover antidotes to the poisonous action of toxic agents? Experiments on man with substances regarding whose properties no knowledge exists will ever be repugnant to medical science; and on that account, as well as because of their entire insufficiency, they cannot be adopted as substitutes for experiments on the lower animals.

Is, then, the progress of pharmacology to be brought to a termination, and the treatment of disease to lapse into the former irrationalism, so distasteful to present aspirations, which are anxiously striving to attain exactitude in the art of medicine?

So far as this country is concerned, this result must inevitably occur, unless we obtain our knowledge entirely from other countries, or unless the freedom of research is again asserted among us.

Such were his closing warnings; and we have been particular in quoting them, and in indicating how general is this feeling among our English colleagues, because there are constant efforts made in this country to secure the enactment of similar short sighted legislation.

Notes and Comments.

Diffuse Inflammation of the External Auditory Canal.

Mr. E. Cresswell Baber, M.B., in a paper on this subject in the *British Medical Journal*, states that the disease must be distinguished from the circumscribed variety, where small abscesses form in the meatus. In diffuse inflammation the walls of the meatus swell uniformly, so that often the smallest speculum cannot be introduced. When the swelling subsides slightly, a speculum well flattened at the inner end will show the tympanic membrane recognizable only by its position, the manubrium of the malleus and the light spot being hidden by the thickening, through inflammation of the epidermic layer of the membrane. Free secretion often exudes from the walls of the meatus, without any perforation existing in the membrane. It is most important to diagnose this complication in healing this disease. For treatment, leeching is useful, and care must be taken that the leeches are applied close to the ear. Incision of the inflamed tissues in the meatus is necessary when the case is severe, with danger of the adjacent bone being affected. An hourly injection of five to ten drops of a solution of acetate of morphia (16 grains to the fluidounce) greatly relieves the pain. In the chronic stage the surgeon should frequently cleanse the meatus with cotton wool, this is less irritating than the syringe. Glycerine of borax is the best lotion for injection.

Treatment of Chronic Eczema.

In chronic eczema, when there is no acute inflammation, local excitants may be used, which, according to the degree of irritation it is desired to induce, may be divided into three classes: 1st, Those which induce slight irritation, as tar and oil of cade, but in much stronger proportion than in acute eczema:—

℞. Picis vel ol. cadini, ℥ss
Glycerit. amyli, ℥j. M.

Sometimes, also, the tincture of iodine and the different mercurial ointments are used.

If these prove unsuccessful, agents of the second class, or those which produce moderate irritation, may be used; the most active of these is the black or green potash soap; a thin layer is spread on flannel and this is kept applied to the affected parts for three or four days. This will induce active inflammation of the dermis, which may be moderated by emollient applications, starch powder, etc. It is an active and very painful method, which should be used only in obstinate cases.

Finally, if no benefit be obtained, recourse may be had to the third class of medicaments, which induce violent irritation, such as lotions containing corrosive sublimate and the following, recommended by Hebra:—

℞. Potass. caustic, 1 part
Aquæ destill., 2 parts. M.

This solution is painted over the affected surfaces with a camel-hair pencil, then compresses dipped in cold water are immediately employed and allowed to remain covering the parts. It is not generally found necessary to employ the solution more than ten or twelve days.

Intramural Interment.

In the *Revue Scientifique*, June 18, M. Robinet maintains that cemeteries in cities are harmless. He says:—

"We are able to affirm that up to our own times not a single positive example of injury can be laid to the charge of the cemeteries of Paris. We may thus with a good conscience assure the public in this respect, and deplore with the illustrious Fourcroy the abuses which some persons have made of discoveries in physics and modern chemistry, to increase and multiply the complaints against the air of cemeteries, and against its effects on the neighboring houses. Let those say so who have not the courage to bear it, that the spectacle of mortality should be removed from our sight, and that in our present life of feverish industrialism we have no time to spend over the dead, and let the speculator banish from Paris the fields of sepulture. But, at all events, let them cease to invoke science and hygiene, and to declare that cemeteries are really centres of infection, and that they are able to develop the germs of the most serious diseases. Let them cease frightening the ignorant public by mere phrases and sonorous words. It is very easy to declare and repeat everywhere that cemeteries are the source of dangerous emanations, but assertions are not proofs."

The Malarial Poison Germ.

M. Burdel (*Le Progrès Méd.*, No. 18, 1881) has made numerous experiments, at first on sheep, then on himself, and afterward on other persons, with dew obtained from marshy pools, or water containing microzoa, microspores, filaments, bacilli, etc., obtained from the air over marshes, and never observed any phenomena approaching the symptoms of true intermittent fever. The micro-organisms found in malarious places vary in genera and species, with the places, time of day and season in which they are observed.

Electricity in Ear Disease.

Dr. Woakes (*British Medical Journal*) believes that muscular paralysis is a most important factor in the causation of deafness and its concomitant symptoms, in a very large proportion of those cases of the disease which occur in adult life. Electricity is not of invariable benefit, since chronic aural affections, where the function of the Eustachian tube is interfered with, produce congestion of the middle ear, which the electric current aggravates. In cases where electricity is suitable, a very weak induced current, applied only once a week, is beneficial. Weber-Liel's intratubal electrode is the most convenient instrument for galvanization of the tensor tympani muscle. The tensor palati may be galvanized by means of a large larnygeal electrode applied over the soft palate in the course taken by the muscle on each side of the uvula, the circuit being completed by placing the sponge-holder attached to the other pole over the mastoid process of that side corresponding to the side of the palate to which the larnygeal electrode is being used.

Temperature in Pregnancy.

Prof. Peter asserts (*Léçons de Chir. Méd.*, vol. ii, p. 658) that in pregnancy the temperature in the fifth and sixth intercostal spaces is higher or equal to that of the axilla; as this is contrary to the usual conditions, he deduces that the lung has a higher temperature than usual, and therefore contains a greater quantity of blood, thus predisposing to simple and inflammatory congestion. MM. Cuzzie et Nicola and M. Marchionneschi having made experiments to verify this assertion, have concluded (*Annali di Ostetrica, Ginecologia, etc.*, vol. ii and iii) that the temperature in the intercostal spaces is constantly inferior to that of the axilla; while it is but 36.2° C. for the former situation, in the latter it is 37.1°. The temperature over the uterus is somewhat lower than that of the intercostal space, although the uterus is at this period as rich in blood as the lung. M. Marchionneschi, in a series of similar and very careful experiments, arrived at the same conclusions, so that the 'poumon chaud' of the Paris professor is not borne out by facts.

On the Incision in the Operation for Strangulated Hernia.

Mr. Paul Swain, in a paper on this operation, in the *British Medical Journal*, objects to the usual practice. After the first incision through the skin, a bit of tissue is pinched up with the forceps and nicked with the scalpel, so that a director can be introduced under the tissue, which is then divided by the scalpel. But unless the scalpel be very sharp the tissues recede before it, and it is very difficult to keep the deeper incisions as large as the superficial one. The scalpel is also very apt to slip off the director. Mr. Swain uses, in place of the scalpel and director, the blunt curved scissors used for extirpation of the eyeball, and finds that the operation can thus be performed with greater rapidity, neatness and safety.

Special Reports.

NO.—XVI MIDWIFERY.

(*Concluded from p.* 306)

Rules for the Forceps.

The following rules, which differ from those found in most text-books, have been defended, in the *British Medical Journal*, July 9th, by Dr. Henry Lowndes:—

1. Traction should be made in the intervals, instead of during the pains.
2. When traction is not being made, the handles of the forceps should be allowed to lie as far apart as they will.
3. During the pains the handles should be merely gently managed, so that they may not be expelled or do hurt.
4. During the passage of the head through the vulva, the forceps should be used, when necessary, as a restraining power during the pains, and labor completed by traction during an interval.

The first of these is the most at variance with ordinary teaching. He defends it on the ground that if we make traction during a pain, we are pulling against both the child and the contracted uterus, and when the head is higher up in the pelvis than during an interval.

Milk Diet as Preventive of Eclampsia.

In the *Gazette des Hôpitaux*, May 14th, 1881, M. Chantreuil records a considerable number of cases of general dropsy, with albuminuria, occurring in the later months of pregnancy, in which, under milk diet, puerperal eclampsia was apparently prevented. One may be selected as an example. A woman in the seventh month became affected with general anasarca; legs, thighs, and abdomen very œdematous, face swollen, the lungs being also invaded to such an extent as to cause the most alarming dyspnœa. The urine contained a large quantity of albumen. The patient was put on milk diet exclusively, taking on some days as many as eight pints of milk. Under this regimen the anasarca and dyspnœa were quite gone in a few days, and the albumen became less and less, till, in three weeks, there was not a trace of it. A month after the onset of these symptoms she was delivered naturally, of a still-born child, pregnancy being about 7½ months advanced; the mother herself made an excellent recovery. In one of the cases in which the quantity of albumen was greatly lessened by this treatment the patient did well throughout, although, in her previous confinement, she suffered severely from puerperal eclampsia. The cases were all of a character to encourage one in the careful carrying out of this treatment. It is essential that it be milk diet exclusively.

Treatment of Puerperal Convulsions.

In this country very large doses of morphia in eclampsia are by no means unknown, and some say, to the great detriment of patients. But lately (*Lancet*, July 16, 1881), Dr. S. Maberly Smith defends them earnestly, especially their hypodermic use. We quote as follows:—

The quantity of morphia to be injected is from one-fourth to one-third of a grain, according to the severity of the case. The simple solution of morphia is more efficacious than morphia and atropia combined; one large dose is better than two smaller ones.

Patients suffering from puerperal eclampsia, whether sensible or insensible, appear to resist the dangerous effects of the drug; it seems to have no bad consequences in cases in which, under ordinary circumstances, morphia would be strongly contraindicated. I have injected the solution in women who were insensible, with stertorous breathing, congested lungs and faces, and contracted pupils, in every case with the best result.

After injection the patient may have one fit before the drug has had time to act, but never has another for hours, provided that the injection is proportionate to the severity of the attack. If at the end of some hours the patient has another fit it is generally a slight one, and a smaller injection than the first should be given. No case of puerperal eclampsia has died in the Melbourne Lying in Hospital since this treatment has been adopted. Several of the patients so treated were as bad as it was possible for them to be, and would, I am convinced, have died under any other form of treatment.

He narrates the details of five cases in which this treatment certainly answered very well.

The "Axis Traction" Forceps.

M. Tarnier's "axis traction" forceps are asserted by his followers to introduce a new era in midwifery. Ordinary pelvic-curved forceps, such as Hodge's, Simpson's, Matthews', Duncan's Barnes', etc., only allow of traction being made *approximately* in the axis of the pelvis when the head is high up; a very considerable amount of the traction force being expended not only uselessly, but injuriously, in crushing the maternal structures against the pubes, and these forceps do not allow sufficient mobility to the fœtal head to follow its natural direction, nor do they indicate the proper and constantly varying direction for traction. On the other hand, the principles on which M. Tarnier's "Axis Traction Forceps," are constructed may be summarized thus:—

1. To allow traction to be made exactly in the axis of the pelvic curve, whether the fœtal head be above the brim of the pelvis or in its cavity.
2. To allow mobility to the fœtal head to follow the direction impressed upon it by the irregularities of the pelvis.

3. To indicate to the operator the exact direction in which he should, at any moment, make traction.

Professor SIMPSON has adapted traction-rods, fixed to a crossbar like that of TARNIER, to his forceps. He maintains that the perineal curve, which TARNIER insisted upon when he first introduced his forceps, is useless, and states that TARNIER himself now discards it. Professor SIMPSON, however, retains the perineal curve in the tractors.

There is no doubt but that the axis traction forceps are based on sound mechanical principles.

Recovery after Loss of the Uterus.

A case showing what serious lesions some women can recover from is given in the *Annales de Gynecologie*. A woman, 29 years of age, was delivered of her ninth child. The midwife, in delivering the after birth, broke the cord. Inserting her hand she seized firmly a rounded body, and amid fearful hemorrhage and intense pain dragged it away. The physician summoned found it to be the contracted, not inverted, uterus. Disinfectant measures were promptly taken, and the patient recovered. The ovaries remained, but menstruation ceased. Nevertheless, sexual desire was not absent, and the woman became strong and healthy.

Cervical Pregnancy.

In 1860, ROKITANSKY related a case where cervical pregnancy was found at an autopsy; through the influence of uterine contractions, the ovule had been projected from the uterine cavity into that of the cervix, and the woman succumbed.

Two other post-mortem cases have been since reported, but SCHULEIN reported, in 1878, the first clinical observation of this kind.

This cervical pregnancy is said to be secondary, for it succeeds uterine pregnancy, and occurs through premature expulsion of the ovule. In a recent brochûre, ("della Gravidanza cervicale") M. PAJUSCO cites two cases where this form of pregnancy was primitive, that is, where the ovule was developed from the first in the cavity of the cervix. Two of these cases were observed by Dr. KEPPLER, and a third by himself. In these cases, the cervix formed a tumor varying in size from a peach stone to that of a large apple.

This purplish tumor appears, on examination with the speculum, almost always spherical, harder than the gravid uterus, and slightly elastic. The external orifice is almost punctiform; in one case a mucous substance completely hid the orifice. The body of the uterus is generally little augmented in volume, and the entire organ has the form of an hour glass, the lower extremity being of greater volume than the upper.

During the period of development there is often considerable pain, and in all cases, vomiting; in one case it was incoercible.

After a certain time abortion takes place; it has been observed from the second to the fourth month.

The muscular fibres of the cervix commence to contract, the external orifice slowly dilates, the rupture of the membranes follows, and the fœtus is expelled. The placenta is partly but not completely separated, whence hemorrhage ensues, and can only be arrested by intervention of the accoucheur and extraction of the placenta.

Researches in Uterine Involution.

The study of uterine involution after labor is delicate and difficult, and the results obtained by different observers are not uniform. Recent special attention to this question has been paid by Dr. SINCLAIR, of this country, Dr. CH. MILSOM, in France (*Thése de Lyon*, 1880), and by Dr. ARRARD, of Paris. The method employed by all was the measurement of the uterus by the uterine catheter. From Dr. MILSOM'S observations it is learned that the involution is much more rapid during the first four or five days after labor than at a later period. It is slower toward the neck than in the body of the uterus; and it is distinctly retarded by suckling. It is completed in about eight weeks in women who do not nourish their infants; in about twelve weeks in those who do. The length of the labor does not appear to influence the duration of involution in any respect.

A comparison of the various observations renders it quite certain that the process is far from a regular one, and even in the same woman, involution differs in duration in her different confinements.

CORRESPONDENCE.

The Vivisection Question.

ED. MED. AND SURG. REPORTER:—

In your widely extended journal, for July 23d, 1881, appeared copious extracts from a lecture by me before the "College of Physicians, of Philadelphia," entitled "Vivisection, with Reference to its Restriction by Legislative Action," and I felt gratified that the sentiments therein expressed, and which I, at least, intended should be conservative rather than ultra, would meet with an extensive diffusion. This intention is manifested in the first paragraph of my paper, in these words: "This subject demands, for profitable consideration, that it be entered upon in a liberal, ingenuous and forbearing spirit."

The comments which directly follow the ex

tracts from the lecture, upon a single paragraph of the paper, did not strike me as fully called for by the cautious and moderate tone of that paragraph. The editorial remarks, however, entitled, "Sentimentality about Vivisection," in the REPORTER of September 3d, coming so soon after the extracts from the lecture were published, could not fail to arrest my attention, exhibiting, as they did, a degree of antagonism to the general purport and object of my paper which I had supposed its moderation and conservative character would have precluded.

The prime object of the lecture was not an attempt to "prevent some very few of the lower animals from being used for the purposes of science," but, on the contrary, might be regarded as an acquiescence in, and an approval of the humane efforts of those who, for some years past, have endeavored (successfully too), to prevent the abuse of vivisection, by the enactment of such laws as would place some check to the atrocities that had too long prevailed in this connection. The restrictive act of the English Parliament is an evidence of the success of these commendable efforts. Nor was this success obtained until the whole subject, including the terrible history of vivisection, was laid bare; and the limited number of vivisections returned to Parliament during the year 1880 is to be accepted simply as the result of the restrictions imposed by law.

Is it rational to suppose, as has been charged, that, through "the ignorance of persons who knew nothing of the purposes for which vivisections are essential," attempts have been made either to prohibit vivisection unconditionally, or limit its practice by legal action? Are the members of the English Parliament, or of the Legislature of New York, and other States where this humane enactment is in operation, so imbecile that they cannot comprehend the facts and the arguments which have been so fully presented for their consideration, either for or against the prohibition or the restriction of vivisection? Or is it not well known that, as a rule, it is the more enlightened and thoughtful portion of the community who are in favor, at least, of restrictive enactments. In this connection I may here state that, before preparing "Thoughts on Vivisection in Reference to its Restriction by Legislative Action," I had casually intimated to a member of the profession my purpose to prepare such paper, when, in turn, he said that "he would not say that he could object to such restriction;" and, in this declaration, he did honor both to head and heart, for no one better than he comprehended the extreme difficulties of vivisection, and the rare qualifications required for its successful practice. I need only further add that the gentleman alluded to is, not only in this country, but in Europe, confessedly in the first rank of those engaged in this most difficult line of research.

GEO. HAMILTON, M.D.

Phila., September 7th, 1881.

[The discussions before the International Medical Congress relating to vivisection, as they appear in this and the last number of the REPORTER, show that the English laws on this subject are bitterly condemned by all the leading scientists. Those discussions are a sufficient defense of our position.—ED. REPORTER.]

Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

Recently there has been a good deal said through the columns of the REPORTER, about maternal impressions, and with your permission I will refer to a few cases:—

The first case, a Mrs. R.: during her pregnancy one of her sons got into a fight and received a knife wound across his wrist, severing the softer parts, to the bone; in this condition the boy was received and wound dressed by his mother; and when the child was born it had a like gash across its forearm, which resisted all efforts at healing until the hand and arm above the wound were taken off; the stump then readily healed.

The second case was a Mrs. T., of Dewiess County, who, while pregnant, attended a young lamb that had its navel torn by some pigs; she tried to cure the torn cord, and the child which was afterwards born to her had a bleeding umbilicus which refused to heal, and at ten years old the otherwise stout boy had a lacerated and running navel. J. DAVIS, M.D.

Nevada, Mo.

NEWS AND MISCELLANY.

The Verification of Clinical Thermometers.

Mr. Leonard Walds, in the First Annual Report of the Winchester Observatory of Yale College, states that the facilities the Observatory offers to have physicians' clinical thermometers corrected gratuitously have been taken advantage of quite largely, as many as 1667 certificates having been issued. He adds:—

"The rapid success of our thermometric work is a cause of congratulation. The makers at first viewing our efforts with suspicion and in some cases sending thermometers we had examined to Kew, to be re-tested, have accepted the authority of our Observatory as final, and have greatly improved, under our encouragement. This is particularly true of the important class of makers of physicians' thermometers, to whom we have loaned standards and taken every occasion to educate and advise with. This great improvement is strikingly illustrated by the fact that while in June, 1880, four-fifths of all the thermometers received (representing seven different makers) were in error over one-third of a degree, and two per cent. had errors exceeding a whole degree, in April and May, 1881, four-fifths of all the thermometers sent had errors less than three-tenths of one degree. The medical press has, without any exception to our knowledge, commented favorably on this branch of our service, and urged it upon its professional readers. It is with feelings of surprise, however, that we have received, in the course of the year, perhaps, fifty thermometers taken from active practice whose errors have exceeded a degree and a-half. There have been, comparatively, but few physicians'

thermometers made in this country which have united accurate graduation of the scale with the requisite age of tube necessary to preclude further sensible changes, and there is little doubt that the great majority of physicians' thermometers now in use in the United States are from one-half to two degrees too high in their indications."

A Plausible Operator

Has been traveling through Iowa and the neighboring States, professing to have a specific remedy for acute and chronic rheumatism, the receipt for which he sells to a physician for fifty dollars, agreeing not to dispose of it to any other in the county—a promise which, of course, he makes no effort to keep. This wonderful specific consists of an internal and an external remedy. We impart them to the public, as supplied us by one of his victims; adding that it does not strike us as the proper thing for a physician to obtain information in this way, or under any such conditions of secresy, and, therefore, we have little sympathy for those this smooth-tongued speculator has victimized.

INTERNAL REMEDY.

Raw linseed oil,	℥ iij
Oil of hemlock (pure),	℥ ij
Oil of sassafras,	℥ ij
Oil of peppermint,	℥ ij
Oil of wintergreen,	℥ ij
Oil of lemon,	℥ j.

Put into eight-ounce bottle and fill up with Head-light oil, 175 *test*. Shake well before using. Dose, from five to twenty drops, from three to five times a day, until, in acute cases, there is a change of urine, when give only one a day, at bedtime, until cured.

For chronic cases give from ten to forty drops, four times a day, after meals and bedtime for one month, and then night and morning until cured.

For a bad case of *sciatica*, or *neuralgia*, give from *one to five drops of the liniment mixed with internal remedy*, twice a day, until pain ceases, and then continue with internal medicine only.

LINIMENT FOR SWELLINGS, ACHES, AND PAINS.

Raw linseed oil,	℥ ij
Oil of hemlock,	℥ ij
Oil of horse radish,	℥ ij
Oil of celery,	℥ ij.

Put into eight-ounce bottle and fill up with Head-light oil, 175 test. Shake well and keep in glass stoppered bottle. Apply to affected parts with camel's hair brush. For a bad case of sciatica, use, hypodermically, three to seven drops over seat of pain. Use freely for lame back and lumbago.

The American Dermatological Association.

This association held its annual meeting at Newport, R. I., Aug. 30th, 31st, and Sept. 1st. The President, James Nevin Hyde, of Chicago, opened the meeting with an address on the relations of dermatology to periodical medical literature. Papers on various subjects relating to skin diseases were read by Charles Heitzman, of New York, James C. White, of Boston, Arthur Van Harlingen and Louis A. Duhring, of Philadelphia, and Edward Wigglesworth, of Boston. The second day's session was devoted to a discussion of the important subject of leprosy in North America. From papers by Drs. Atkinson, of Baltimore, Hyde, of Chicago, and Schmitt, of New Orleans, it appears that leprosy is increasing in the United States. Papers were read by Dr. Heitzman and others, and the following officers were elected: President, Dr. J. N. Hyde, Chicago; Vice Presidents, Drs. Fox, New York, and Hardaway, St. Louis; Secretary, Arthur Van Harlingen, Philadelphia; Treasurer, Dr. Atkinson. A full report will appear in our next.

The British Medical Association.

This important body had its regular annual session immediately after the International Medical Association. The proceedings of the latter have occupied so much of our space, and have such paramount claims to attention, that we have not as yet found space for our usual report of the more practically valuable papers read before the British Medical. We shall, however, find space for it before long. The meeting was a satisfactory one, but a certain languor was visible, owing to the exertions of most of the members at the larger Congress.

The Condition of the President

At the time we write this, is far from promising a favorable termination. The implication of the lungs in cases of pyæmic blood-poisoning is always a matter of gravest anxiety, and we fear that in this instance even the excellent care and attention the patient receives, will scarcely allow a favorable prognosis.

The American Academy of Medicine

Will hold its Sixth Annual Meeting in New York City, on Sept. 20th, at 3 P.M.

RICHARD J. DUNGLISON, *Secretary*.
P. O. Box 2386, Philadelphia.

Personal.

—Dr. George J. Ziegler, of this city, has for the present located at Atlantic City, where he will give special attention to nervous and pulmonary diseases.

—Dr. E. Lloyd Howard, quarantine physician at Baltimore, was drowned, Sept. 5th. He attempted to jump from his boarding tug to the wharf, and fell between the pier and the vessel, striking his head and sinking.

—The election of Mr. Erasmus Wilson to the presidency of the College of Surgeons has been severely criticised in the *Lancet*, on the ground that Mr. Wilson is a dermatologist, and therefore more of a physician than a surgeon. As a general surgeon, the *Lancet* declares Mr. Wilson is not eminent.

—Rev. Henry Ward Beecher announced by letter to the United States Hay Fever Assoc'a-

tion, at its meeting at Bethlehem, N. H., Sept. 5th, that he does not expect to visit the White Mountains again for his complaint, as he believes he has discovered a medicine which will prove a remedy. The attendance of the meeting was large, comprising persons from various States in the Union, some as far west as Dakota, and others as far south as Georgia.

Items.

—An act to provide for the registration of births, marriages and deaths was passed by the Legislature of Delaware last spring, and went into effect July 1st.

—The curiosity-mongers in and near Kansas City have had a chance to indulge their taste in looking at a "double child" born near there. It survived only a few hours after birth.

—The constitutionality of the act obliging physicians to register in this State is soon to be tested in Harrisburg, where a number of physicians have refused to accede to its requirements. The sooner the legality of the Act is tested, the better.

—Recently the newspaper press has had some sharp criticism of the health authorities at Charleston, for their treatment of the schooner M. C. Mosley, of Boston. This vessel, it would appear, picked up at sea the captain and crew of the brig Alphonse, from Cienfuegos for New York. The Alphonse had been disabled in a storm, and, being in a sinking condition, all hands took to the boats, from which, after twenty-four hours' severe suffering, they were rescued by the M. C. Mosley, and taken to Charleston, her port of destination. As soon as it was discovered by the authorities that the rescued mariners were from a port that had been declared to be infected with yellow fever, the vessel was ordered back to quarantine, to the great inconvenience and loss of her owners as well as her captain and crew. It is urged that there was no danger of contagion under the circumstances, and that the effect of the proceeding will be to discourage commanders of vessels in future from saving lives at sea, unless they are first assured that the persons in distress are not from yellow fever ports. This does seem an unusually hard case, and certainly the health authorities showed more zeal than discretion.

OBITUARY NOTICE.

JAMES C. FORRESTER, M.D.

Dr. James C. Forrester, one of the oldest physicians of New York, died August 20th, at his residence in New York City. Dr. Forrester was born August, 1811. He was educated for the medical profession, and was first graduated from Rutgers College, in New Jersey. In 1834 he graduated from the College of Physicians and Surgeons in New York, after having served the two previous years as house surgeon at Bellevue Hospital. He continued to hold this position until 1835, when he went into practice for himself.

QUERIES AND REPLIES.

Impotence.

Dr. J. Davis, of Mo., writes us, that in sexual atony he has prescribed damiana, and that it indicated no aphrodisiac properties whatever. He has found positive results from the following:—

℞ Tinct. hellebor. nig., 3ij
Aloes,
Myrrhæ, aa 3j
Cantharides, 3iss. M.

SIG.—A dessertspoonful night and morning, in a glass of sweetened water.

Dr. J. P. B., of Ark., recommends *circumcision*. He states that he never knew the operation to fail.

A Correspondent asks the dose of staphisagria, as recommended by Dr. Blockson, p. 230.

Syphilitic Alopecia.

Student asks: Is syphilitic alopecia permanent, or will the hair be renewed under specific treatment?

Ans.—Syphilitic alopecia offers a rather more favorable prognosis than some other varieties. In young and otherwise healthy subjects, when the specific poison is eliminated, the hair can, by proper attention, be measurably restored.

Dr. T. M. M., of Texas.—Fothergill's hydrobromic acid, has, it seems to us, hardly met the expectations raised about it a year or two ago. It is too sharp and pungent. The acid prepared by Fothergill's formula is quite different from the ordinary commercial article. Dr. Squibb recommends about gr. xxx in f.3iv water. See his article in MED. AND SURG. REPORTER, April 20th, 1878, p. 314.

Eczema of the Hands.

Dr. B. B. G., of Tenn., writes: Will some of your subscribers please suggest what may cure an inveterate case of Eczema Mannum? The lady is twenty-five years of age, a widow, and suffered with it since the birth of her child. It is hereditary. When it appears first in the shape of vesicles, they burst, run into each other, gradually dry up, leaving deep fissures in the flesh, with peeling off of the dead skin. At present it is spreading upon the arms. All functions are well performed. The treatment consisted in alteratives, as arsenic, mercury, iodine, etc. Externally an ointment, etc.

MARRIAGES.

HIGGINS—STEVENS.—On Sept. 7th, at Lake, Mo., Dr. R. M. Higgins, of St. Louis, and Miss Jennie C. Stevens, daughter of Dr. R. H. Stevens.

HURLBUT—BROOKS.—At the residence of the bride's mother, Stamford, Conn., Tuesday, August 26d, by the Rev. R. P. H. Vail, Dr. A. M. Hurlbut, of Stamford, and Belle, daughter of the late Horace Brooks.

VAN ARSDALE—TELLER.—On Thursday, Aug. 25th, by Rev. Talbot Chambers, D.D., Henry Van Arsdale, M.D., and Sarah A. Teller, both of New York.

VEIRS—BEERS.—Dr. Charles O. Veirs, of Jersey City (formerly of Brook Co., West Va.), and Mrs. Sarah H. Beers, of Keyport, Monmouth County, New Jersey.

DEATHS.

STERLING.—At Pittsburg, on the evening of Aug. 6th, Harry F. Sterling, M.D., formerly of Philadelphia, son of the late Robert B. Sterling.

SMITH.—On the evening of August 20th, Warren G Smith, M.D., in the forty-fourth year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1282.] PHILADELPHIA, SEPTEMBER 24, 1881. [Vol. XLV.—No. 13.

Original Department.

Lecture.

EMPYEMA AND ITS TREATMENT.

BY PROF. W. WAGNER,
Of Königshütte.
Translated for the Medical and Surgical Reporter.

Gentlemen:—The patient whom I present to you to-day is a laborer in a foundry, aged 18 years, and is very well developed for his age. He was taken with a chill and sharp pain in his right side on the 28th of March last, and was brought to the hospital on the first of April.

Upon examination we found dullness over the lower portion of the right lung, loud bronchial respiration in the same region, increased fremitus and some friction sound in the axillary region; in fact, the physical signs of pleuro-pneumonia. There was a pretty severe cough and expectoration of small quantities of glairy, blood-tinged mucus. Temperature 104, pulse more than 100, general conditions favorable. In the next eight days his condition remained unchanged, temperature (in ano) varied from 103 to 105 and was reduced by cold baths once in three hours. The pulse was sometimes rather small and jerky, 120, and after the eighth day it even ran up to 136. The physical signs over the lungs remained the same. Besides the cold baths we gave also stimulants, wine and camphor.

On the twelfth day the temperature, which at four o'clock reached 104.5, sank at seven o'clock, accompanied by copious diaphoresis, to 99.5. On the following morning the physical examination proved that resolution had begun in the affected part of the lung.

The temperature remained normal for only twenty-four hours, rose next evening to 102.2 and varied in the next eight days from 104.4 to 102.2. The patient complained of severe stitches in the right side and slight chills.

On the 16th of April I discovered an exudation in the right pleural cavity, about as large as my hand. The lung seemed to have entirely regained its normal condition. After six more days the exudation, which was at first regarded as serous, had risen to the middle of the scapula and the heart was pushed to the left.

The temperature had sometimes risen to nearly 104, the general condition of the patient had become more serious, and to the other symptoms was added considerable apnœa. A test puncture which was now made gave us thin fluid pus with little smell. We had, therefore, a case of empyema to deal with.

On the same day, the 22d of April, we operated by opening the pleural cavity.

After the patient had been narcotized and laid on his left side, the entire right half of the thorax was thoroughly cleansed with soap and a five per cent. solution of carbolic acid, the armpit was shaved, and then another test puncture was made in the ninth intercostal space, within a few inches of the spinal column, which puncture again gave us pus.

Under carbolic spray we then made an incision through the skin, a little above and parallel with the ninth rib, about 1¾ inches in length. The muscular tissues were then cut, coat for coat, and two small arteries ligated with fine catgut. After the pleura was laid bare, I again introduced an aspirating needle, and again obtained pus, whereupon I pierced the pleura with a narrow bistoury. The pus was ejected in a stream. I allowed

about sixteen ounces to escape, and then introduced a narrow dressing forceps. During this time the patient had recovered from the anæsthetic, which had been discontinued as soon as the pleura was exposed. By the movements of the forceps I regulated the flow so that in about ten minutes thirty two ounces more had flowed from the openings. Then the opening in the pleura was enlarged by means of the forceps and the finger introduced. The diaphragm, which lay on a level with the lower edge of the wound, was smooth and soft, as was also the pleura costalis. By causing the patient to take a deep breath, or to cough, we could distinctly feel the lung pressing downward; as much of it as we could feel was also free from thickening and coagulæ. Then the entire cavity was repeatedly washed out with a three per cent. solution of carbolic acid warmed to the proper temperature, until the same flowed from the wound perfectly clear. There were no coagulæ washed out. A rubber drain, through one end of which a needle was pierced, was now introduced obliquely upward to the depth of 2½ inches. Then the skin on both sides of the wound was pierced with a needle and two small loops of silk thread formed, through which the ends of the needle were placed, thus preventing the displacement of the tube.

The first covering of the drain was a mass of quilled Listerian gauze (gekrüllte Listergaze), over this came the typical Listerian dressing, the edges of which were underlaid with strips of salicylated wadding (10 per cent). The entire dressing was first fastened with gauze bandages, over this a thick layer of salicylated wadding, and over all a soft fustian bandage.

The patient was then placed in bed and kept in a sitting posture.

Neither that evening nor the next day did the secretion penetrate through the bandages; nevertheless, the latter were renewed, because I believed that the drain had become displaced or was obstructed. The drain was removed and not a drop of secretion flowed from the wound. The inner bandages, however, were saturated with fluid pus.

The dressing was renewed three times, the first remaining three, the next five, and the last six days.

On the 17th day after the operation the wound was closed, except a small granulating sore on the surface.

At the present time the patient complains of nothing; he has regained his strength, and has a good appetite. Six weeks after the operation he was able to resume his trade. At present there is scarcely any difference in the physical signs over both lungs, and the man, as you see, is in perfect health.

This is a case of simple empyema, operated and treated upon antiseptic principles. It is but a short time since this operation was considered of questionable benefit, but Lister's celebrated discovery has, here too, borne blessed fruit.

With Lister's dressing the treatment of empyema has entered a new stage, and the operation is not only one that is under all circumstances admissible, but even, at least in simple empyema, entirely without danger.

Formerly it was considered safest to defer the operation for empyema as long as possible; to-day the principle is everywhere recognized, to operate as early as possible.

In empyema we have nearly the only abscess in which we are forced to select the most resistant wall for the opening, while the movable walls are removed from our reach. The reëxpansion of the compressed lung, the reapposition of the same to the resisting walls of the thorax are the chief objects which we must strive to attain. And here lies the entire difficulty in treating this affection; the unconditional indication to operate as early as possible. As long as the pleura pulmonalis is soft and the lung is yet expansible, we have the best chances for recovery. If we operate in the earlier stages of empyema we have the most favorable chances for the reëxpansion of the lung and for the reapposition of the walls of the abscess. On the contrary, the older such an abscess becomes, the thicker the pleura, and the more resistant will the inner wall become, and the less expectation can there be for the closing of the cavity.

But how shall we operate? Various trocars and aspirators have, during the last two decades, been tried, and occasional cases have been reported, in which a cure has been effected after one or more punctures had been made; but the chief difficulty of this method of operating lies in the fact that a small portion of the pus must always remain in the pleural cavity, which often gives rise to a renewal of the empyema.

Bätz has tried to remedy this by constructing a trocar with two arms, through which the pleural cavity may be washed out with an antiseptic fluid, and to the exclusion of air. I have made two trials with this apparatus, but the results have not been satisfactory.

The principles which at present govern the treatment of empyema do not allow us to resort to puncture more than once. If we do not

succeed in effecting a permanent subsidence after one trial, we must forthwith resort to the operation by incision. The older we allow an empyema to become, the less favorable are the chances for success with the incision, and by repeated trials at puncturing and aspirating, we lose much valuable time. I, therefore, regard the operation by incision as the most proper one to resort to.

In what manner and where shall we operate? It is clear that we must endeavor to obtain the most complete evacuation of the pus. For this purpose we should make the opening at the lowest point of the thoracic cavity. This would be in the eleventh intercostal space, near the spinal column. Rational as this seems, there are nevertheless reasons which make this ideal point untenable; the pleura may have become united by some old pleuritic process, and the apposition of the diaphragm to the chest wall may prevent the free discharge of pus. Therefore, the fourth, fifth, or sixth intercostal space in the axillary region has generally been chosen for the operation. In our case, as you see, I chose the ninth intercostal space, near the spine. I must admit that I would not recommend this point; the difficulties in the way are not light. The muscular coats are thicker, and therefore more arteries must be ligated, thus rendering the operation tedious; again, it may happen that, as already stated, adhesions of the pleura exist, and thus the abdominal cavity may be entered.

Notwithstanding the fact, therefore, that this point is very favorable to the evacuation of the pus, we must, nevertheless, look upon it as inadvisable to operate here.

If we make the incision higher, we must lay the patient in such a position that the point of incision is the most dependent portion of the body. If we operate in the fifth or sixth intercostal space, at the edge of the latissimus dorsi, then lay the patient on his side, raise the lower portion of the trunk a few inches, we have the most favorable position for the evacuation of the thoracic cavity. Grown persons are easily kept in this position, but in children it is more difficult.

Before we operate, we must consider whether it is advisable to use anæsthetics. I believe that we may use them in all cases, without more fear than we have in any other operation. Sudden deaths during operations for empyema cannot be attributed to the chloroform, but are generally caused by cerebral anæmia, embolus, etc., etc.

The technic of the operation is very simple. An incision one and three-fourths to two inches in length is made along the upper edge of the rib, then the muscles are divided, layer after layer, until the pleura is exposed, then the latter is opened with a narrow bistoury. We may also operate as König advises, by resecting a piece of the rib about four fifths of an inch in length and entering the thoracic cavity through the periosteum and pleura. The pus should not be allowed to flow too freely. Where it is possible, the finger should be introduced into the wound in order to ascertain the condition of the walls of the cavity. The quality of the pus should also be carefully noted. If the latter is fluid and of normal smell, if it contains no fibrinous flakes, or coagula, the cavity need not be washed out at all, and a drain may be introduced immediately after the evacuation. If, however, the pus has much smell, or if it contains coagula, or flakes, it is necessary to thoroughly rinse the cavity.

Carbolic acid solution is not considered appropriate for this purpose, because it has been known to produce carbolism (dark green urine and symptoms of collapse, and even death), therefore I have lately employed a seven to ten per cent. solution of boracic acid. König recommends three to five per cent. solutions of chloride of zinc. Salicylic and thymol solutions are also employed, and five per cent. solution of acetate of aluminium is recommended. It is necessary that the solutions used be of sufficient strength to exclude the introduction of all infectious organisms and the rinsing should be continued until all flakes, etc., are removed.

If we find the pleura thickened and hard or covered with pseudo membranes and coagulæ we must employ stronger solutions and endeavor to produce the most thorough disinfecting and alterative action. After the cavity has been thoroughly cleansed a thick drainage tube should be introduced. Its length should not exceed two inches, as longer tubes easily produce a hurtful irritation. The tube is kept in position as already stated.

That it is not necessary to use a spray during the operation, and until the bandages are applied, in order to preserve a complete antisepsis, is, I believe, not yet decided, notwithstanding the influence which has been brought to bear against this procedure of late. I have at least used it in all cases during the operation and at all changes of the dressing.

At the first dressing I lay a large ball of quilled carbolic gauze immediately over the drain, over this a layer of ten per cent. salicylic wadding, then the typical eight layers of Listerian gauze with which the entire side of the trunk from the axilla to the pelvis should be covered. The

edges of the dressing are to be covered with thick strips of salicylic wadding and the entire dressing fastened with rollers.

In most cases the first dressing may remain for twenty four hours. It should not be allowed to remain longer than this, because the drain may become displaced. For the same reason it is advisable not to allow the subsequent dressings to remain too long.

Repeated rinsing of the cavity at the renewals of the dressing is only necessary in the more complicated cases. If the pus has an objectionable odor, or if coagulæ or flakes continue to be discharged from the wound, I consider a daily rinsing of the cavity with a disinfecting solution as absolutely necessary until the, in such cases, high temperature is permanently reduced.

COMMUNICATIONS.

CLINICAL STUDIES OF INEBRIETY.

BY T. D. CROTHERS, M.D.,
Of Hartford Conn., Superintendent of Walnut Lodge.

Relations of Inebriety to Life Insurance.

My attention was called to this subject by a patient under my care, who was insured in different companies for over thirty thousand dollars. His general history was as follows: Inheriting a neurotic diathesis from an inebriate grandfather and consumptive parents, he began to use alcohol soon after marriage and at the beginning of his business career. Five years after he failed, and drank to intoxication, and from this time was both a periodical and constant inebriate, depending on circumstances. He began business again, and was insured for ten thousand, in a large company. For the next eight years he grew steadily worse, drank severely at times, then had a free interval, during which extraordinary energy was manifest in all his business relations. He came under my care a chronic inebriate, full of delusions, with both mental and muscular incoördination, using all means to procure spirits at every time and occasion. He drank mostly at home and in the club house, and from his own statement, had been insured by the agent of the companies without reference to his condition. After a few weeks' residence under treatment, he grew impatient, and was removed against our wishes, relapsing a few hours after leaving the asylum, and ten days later died of exhaustion and cerebral congestion, following excessive use of alcohol.

The companies' agent, who had insured him in three different companies, for the aggregate sum of twenty thousand, sent me a certificate to sign, from a physician, where death had been put down from pneumonia. I promptly refused to sign it; but the insurance was paid to the family of the patient, and the record of pneumonia went down on the vital statistics of these companies. This incident called my attention to the fact that a very large per cent. of all my patients who where wealthy were carrying large insurances upon their lives. If this is true of all inebriates of wealth, the value of life insurance, either as a means of protection or as furnishing reliable statistics of disease or death, is both doubtful and uncertain. Through the kindness of the medical officers of two prominent companies, I have been given access to many facts, which may be outlined under the following heads:—

1st. *Inebriety is one of the most Serious Perils which threaten Life Insurance Companies.*— There is no disorder about which there is such confusion and difference of opinion. Agents may honestly think inebriety of little importance in the question of health or longevity. In the business circles of every city there is a constantly increasing number of active men who are using all forms of alcohol to excess. This condition follows naturally the intensity of living, and the exactive demands of business, wearing out the nervous system, leading to all kinds of artificial means to sustain the weakened organism. Instead of trusting to rest and change for relief, the business man and clerk resorts to alcohol, with the result of breaking down, developing inebriety, or some other disease that is always fatal. The active business men of to-day who are moderate drinkers are the inebriates of to-morrow and the incurables of the next day, and they are the men who carry large policies of insurance on their lives. When their business becomes uncertain, they become insured. When ill health and a doubtful future looms up, they rush to the same source. The clerk and professional man, on a salary, with a large family, turns to life insurance for the future, particularly if perilled with the consequences of inebriety. This is rapidly growing in every section of the country, and if the company is reputable, the rush of secret inebriates and worn-out nervous invalids far exceeds the healthy applicants. The officers of these companies are alarmed at this danger, but are more or less powerless to resist or prevent the frauds, and the question now is, what can be done? Every company, notwithstanding all their precautions, are carrying immense insurances on inebriates, at frightful peril to their interests. 2. This is confirmed by the death rates reported

to the companies from diseases which are intercurrent to inebriety, and which are often used to cover up the real condition. Inebriety is always attended with both functional and organic disorders of the liver, kidneys, stomach, and nervous system; and when inebriety is not mentioned the physician might easily diagnose any one of these diseases, which would appear, without any study, to be the cause of death.

Pneumonia is a frequent cause in these death rates, and follows most naturally in inebriety. In one hundred deaths of a single company, taken in rotation, twenty-four were put down to pneumonia, and thirty-one to consumption. From the policies of these cases, it was ascertained that sixty-two stated that they used alcohol, either occasionally or in moderation, and thirty-eight were rated as total abstainers. The strong presumption that a large proportion of the moderate drinkers were inebriates was clear, from the history and the general facts of their lives. This same company contested a death claim of ten thousand, from some legal blunder, when it appeared that the patient died of delirium tremens, although both the agent and physician had considered it cerebritis from concussion. The fact has long been observed, that the mortality from total abstainers is one-half less than in those who are reported to use alcohol. Take two hundred cases that have been insured for ten years, from any section of the country, and the per cent. of deaths among the moderate drinkers will be in the proportion of five to two; that is, for every five deaths, in persons who were not abstainers, there will be two among abstainers. A comparison of one hundred deaths of non-abstainers will indicate a very large per cent. of causes in this class, reported as due to pneumonia, affections of the heart and kidneys, etc.; while in the abstainers these diseases do not appear prominent. If the history of any one of the former cases are investigated, inebriety will always be found as a rule. Cases of concealed inebriety frequently come to light when the agent is particularly vigilant. These facts furnish unmistakable proof that inebriety is both perilous and an increasing danger to insurance companies. 3. This is, in a great measure, owing to the confused views of the officers and medical examiners of life insurance companies.

Eight out of thirteen companies that are prominent and wealthy assert that the moderate or temperate use of alcohol is no detriment to the risk of the life insured. These companies must rely entirely upon the opinion of the local examiner, or agent, as to what constitutes a temperate or intemperate use of spirits. The complex motives that will enter into this decision make it morally certain that ignorance and deception will prevail. First, the agent will be influenced by the prospect of more business, and the local examiner will have no convictions of inebriety, other than that it is a vice which can be checked at the will of the victim; the applicant will be anxious to be insured, and so conceal what he thinks may be obstacles to this end. Both the agent and local examiners may be moderate drinkers, and hence draw the dividing line promptly in favor of the applicant. But if both are temperate and honest, they are ill prepared to determine any such psychological distinction, and say that the use of alcohol in no way impairs the health of the person. If the applicant is an inebriate he will assert most positively that he can stop, and will do so any time. This the examiner considers as conclusive, and acts upon it.

The usual history is as follows: The agent finds the applicant with a history of moderate drinking, who protests that he is the victim of slander, and never could be an inebriate. The local examiner is not acquainted with these cases, only in the most general way, hence accepts the statements of the applicant as conclusive. Often these cases are emphatic defenders of total abstinence, and talk with apparent full realization of the danger, and exhibit great earnestness to help others, while secretly they drink constantly. The history of drinking is waived, as of minor importance, and the application is accepted. Later, the agent hears of the excesses of the applicant, and calls on him. Of course, he promises to stop, and the agent is satisfied, but the applicant becomes more cautious and careful that the agent does not know of his habits or personal history afterwards. A long interval, in which the agent gets no account of his life; then comes notice of death, and the physician, who has no clear idea of the disease of inebriety, is sure to find some organic affection which sufficiently explains the cause of death. Should any question be raised as to his drinking, the most confused statements and testimony will appear. The examiner at the home office, looking over the records and comparing them with the rumors which have reached him from the local examiner and agent, who had given full accounts of former examination, is morally certain that death has taken place from inebriety, and yet the positive proof is difficult to obtain. Both the agent and local examiner have apparently done their duty, and the company has no other recourse but to pay the claim. The company

makes the mistake in insuring any one who uses alcohol, and then trusting to non-experts to determine where the proper use and abuse unites or begins. The same as if a company insured against insanity and accepted cases of eccentricity and uncontrollable passions and emotions, leaving to the local examiner to draw the dividing line between these conditions and insanity. 3. The confusion of opinion as to the nature and character of inebriety opens the door for fraud and deception which is almost impossible to detect. In all cities there is a large class of clerks and business men who are barely able to keep up more than their expenses, that are inebriates; they have no hope of leaving property for the future, and look to life insurance for help to their families when gone. They belong to a class who are both constant and periodic inebriates, and who are able to conceal their real condition from general observation. They can command means to keep up their policies. and present an appearance of general health, hence are not the subject of observation or inquiry by either agent or examiner. (I append notes of two such cases.) Cases of periodical inebriety are much more difficult to detect, because the paroxysm may be anticipated and provided for, as in the case of a bank president who has thirty thousand dollars on his life, and who, when the paroxysm comes on, goes away to a distant city, and remains concealed, for a week or more, until the attack is over. His policy reads that he uses alcohol occasionally, in moderation. The local examiner uses spirits, and the agent drinks beer freely, and both of these men would naturally have very liberal views as to the use and abuse of spirits.

In some sections of the country public sentiment endorses the free use of spirits, considering that no special damage to health follows, unless the person has delirium tremens. Here, in the absence of any authority, both the agent and local examiner follow this public opinion, and interpret the instructions of the company from this standpoint. To illustrate: a local examiner in the southwest passed a man who had drank constantly for twelve years, and who was a pronounced inebriate, under the firm conviction that the use of alcohol had not impaired his risk of life, simply because he, in a most general way, seemed to be no worse for this abuse. The company cancelled the policy, to the disgust of both agent and examiner, who thought it a great injustice. Many able physicians entertain the most confused opinions of the effects of alcohol on the system, and base their opinions upon observations equally superficial. Thus a periodic inebriate is not a dangerous case, particularly when he has long intervals of sobriety; and a constant drinker that is not stupid, or staggers, or has paroxysms of intoxication, does not materially injure his expectation of longevity.

Physicians, as a class, entertain views of the abuse of alcohol that are influenced largely by the temperance movements of the day. They either endorse the doctrine of total abstinence, and become temperance reformers, believing in the vice of inebriety, or they deny this and urge its value, either as a food or medicine, doubting any disease, and affirming that it is a matter of the will. These views are influenced by any special habits or taste for spirits which they may entertain. (See cases appended.) There is no agreement among companies as to the danger from alcohol in the life risk, and the competition for business is so great, with so many individual factors which enter into every policy, that this confusion is inevitable. The company who insures non-abstainers is doing a dangerous, uncertain business. Every company, no matter how wisely managed, is in constant peril from this source, through the ignorance and duplicity of its agents, who fail to discriminate cases of inebriety, either in the formative or advanced stages. The premium rates based on the false returns of death work a great injustice to all concerned, and literally prevent life insurance from honestly and actually insuring against death from causes unforeseen.

Medical Societies.

American Dermatological Association.

Fifth Annual Meeting.

Held at Newport, R. I., August 30th and 31st and September 1st.

Special Report for the Medical and Surgical Reporter.

First Day.

The first day's proceedings were opened by an address from the President, Dr. James Nevins Hyde, of Chicago, entitled

The Relations of Dermatology to Periodical Medical Literature.

It was his purpose, said the speaker, to inquire briefly what may be rightly expected of periodical dermatological literature in its attempts to supply the needs of the profession at large, respecting chiefly the diagnosis and treatment of skin diseases. Such literature exists in the special journals of limited circulation on the one hand and the current general medical issues on the other. Most medical men derive their knowledge of skin diseases from the latter.

Contributions to dermatology in the general medical journals are either (1) solid and praiseworthy original observations, or deductions from the observations of others; (2) reports of imperfectly observed facts or crude opinions; (3) worthless papers of ignorant men; (4) papers written by men of ability and knowledge, but who, either from an undue haste, originating in the pressure of many duties, or from a foolish desire to identify themselves speedily with the subject upon which they write, or even from other motives not of the highest character, deluge the medical press with voluminous papers filled with verbose iterations of ideas made public before their day, often, by others, in much better form, which serve to encumber the world with a little more of the rubbish swept annually by a pitiless indifference into the limbo of the forgotten.

A comparison of the papers published in the last few years with those of earlier date shows marked improvement and promises well for the future. On some topics, however, there is room for more extended knowledge among the mass of the profession. Some popular errors, said the speaker, which require refutation or correction are the following:—

1st. That because a disease exists and is visible on the surface of the body, it, for that reason alone, requires active treatment. Some diseases of the skin need no treatment.

2d. That because a disorder of the skin exists it can always be readily relieved by an expert. There are inevitably fatal skin diseases, and there are others so inveterate that the most practiced skill can give no relief.

3d. That after relief is secured by treatment many diseases of the skin may be so managed that they will not recur. This implied demand seems to be made upon the dermatologist alone. The patient with a fractured leg does not ask of his surgeon a guarantee that he will not suffer a similar accident if he fall beneath the wheels of a rolling car; and so the patient with a disease of the skin should not expect to be protected against the results of neglect or imprudence. Some diseases of the skin recur continually, and will do this for a lifetime. It is true that these recurrences usually result from adverse extrinsic influences; but it is often not in the power of the physician to set these aside. In such cases he discharges his full duty when he forecasts the future and describes the results of the best treatment under forbidding circumstances.

4th. That the expert can pronounce at once, perhaps after a glance at some limited portion of the skin, upon the character of a disease. No opinion is worth the time of the patient or consultant which is not based upon a most careful examination at all points, internal and external, and investigation into the history of the case. It is a common experience to be shown a patch of diseased skin or a few distorted hairs, upon which follows the inevitable question, "What do you call this?" The speaker had recently been stopped on the street by a physician of large practice and wide reputation—doubtless on his way to the bedside of his patient—who hurriedly demanded, "Please tell me how to treat eczema?"

5th. That a practicing physician need not always make an accurate diagnosis, and that a failure on his part to do this need not be considered as perilous to himself. Intelligent patients lose confidence in the physician who attempts to treat without knowing the name or nature of the affection with which he has to deal. The words of the speaker should not be interpreted as a plea for wider opportunities for the consultant. The educated gentlemen who have made themselves masters of any special department of science in this country certainly have found no lack of appreciation and that reward for skilled labor which all honest work inevitably yields. The words of the speaker, if interpreted as a plea, should be held as pleading for higher attainments on the part of the general practitioner.

6th. That such remedies as mercury, arsenic and the iodide of potassium may be administered in any case where an accurate diagnosis has not been established, and in such cases may be used unadvisedly. Said the physicians of a past generation, "When you do not know what else to do, treat for syphilis." It is not too much to say that for one patient who is benefited by the administration of these remedies in the hands of incompetent men, there are ten who are made worse. The vulgar idea that all disorders of the integument are in some obscure way to be connected with a syphilitic taint in one generation or another, the erroneous opinion that syphilis descends through many generations and lurks obscurely in the eczema of the infant, the psoriasis of the adult, the sycosis of the young man, or the acne of the young woman; these are the spectres that scare the foolish, whether they call themselves doctors or laymen. It should be considered a crime to subject a man or woman to a systematic mercurial course for the relief of an affection supposed to be syphilitic, but in reality not such.

7th. Lastly that the study of diseases of the skin is the pursuit of a narrow specialty, leading to a knowledge of superficial eruptions upon the surface of the body, and to an ignorance of the functions and maladies of important internal organs. The dermatologist requires the amplest preparation in a finished medical education and experience. He needs to be a physician in the highest sense of the term.

At the conclusion of the President's address the meeting was opened for the reception of papers. Dr. Charles Heitzmann, of New York, read a paper entitled

A Contribution to the Minute Anatomy of the Skin.

The writer described his investigations chiefly regarding the minute anatomy of the normal hair, going to show that the stock illustrations of the anatomical and dermatological text-books are incorrect. The paper was illustrated by numerous impromptu sketches, and carefully prepared drawings, and in addition by a beautiful microscopic section of normal hair, perhaps the most perfect which has ever been made.

Dr. James C. White, of Boston, read a paper entitled

Limitations of Internal Therapy in Skin Diseases.

The writer desired to approach the consideration of the subject from a purely empirical standpoint, uninfluenced by theories and traditions.

Cutaneous pathology offers an exceptional opportunity for the study of drugs; yet cutaneous therapeutics is no more fixed or satisfactory than the therapeutics of general medicine. In spite of the numerous remedies which have been vaunted as useful, or even specific, only a few have gained and retained a well established reputation. The writer sketched an imaginary committee of the American Dermatological Association, which should conduct a systematic investigation of new drugs and systems of treatment. By way of illustration he cited the following subjects of investigation: 1. The action of our most celebrated mineral springs. 2. The power of electricity over the so-called neuroses of the skin (including zoster). 3. To what extent may certain substances in common use be applied to the skin without danger, viz., compounds of zinc, lead, mercury, carbolic acid, etc.

Dr. Heitzmann expressed his pleasure at hearing such views expressed. Men like Erasmus Wilson had done serious injury to dermatology, by hastily asserting the influence of internal medication in diseases of a purely local character and indiscriminately.

At the evening session Dr. Arthur Van Harlingen, of Philadelphia, read a paper on

Lymphangioma Tuberosum Cutis Multiplex,

giving an account of a case where small compressible tumors in great numbers, intermingled with fibroma-like growths, were found scattered over the surface of the body. The tumors, on microscopic examination, were found to be composed of fibrous and granulation tissue with scattered lymph spaces.

The reading of this paper was followed by a discussion, participated in by Drs. Heitzmann, Hyde, Atkinson, Duhring, and Wigglesworth, the relationship of this form of disease unto other lymphangiomata, with lymphatic tumors in general, and with molluscum fibrosum.

Dr. Louis A. Duhring, of Philadelphia, then read a paper, entitled

The Small Pustular Scrofuloderm,

describing a series of cases of a peculiar sluggish papulo vesicular affection, occurring chiefly in the limbs, rebellious to treatment, and resulting in the production of "punched-out" looking scars. The discussion on this paper by Drs. Heitzmann, White, Graham, and Van Harlingen, turned chiefly on its relationship to the acne cachecticorum of Hebra. Dr. Duhring insisted that the affections were quite distinct.

SECOND DAY.

The report of the Committee on Statistics, Dr. James C. White, of Boston, Chairman, was read. It included a classified list of some eleven thousand cases of diseases of the skin occurring during the previous year in all parts of the United States.

As an appendix to the report, the leprosy statistics of 1880–81 were read by the Chairman of the Committee, the results going to show, as former reports also have done, that not only is leprosy of more common occurrence in North America than was formerly believed, but that it is also on the increase.

The rest of the morning session was given up to the discussion of this important and interesting subject.

Dr. Atkinson, of Baltimore, read a paper entitled

A Case of Tubercular Leprosy,

giving an account of a case occurring *de novo* in Maryland. The patient never having lived out of the State. A curious fact was that she had lived in the neighborhood, and to a certain extent, in friendly intercourse with another person who was afflicted with leprosy, and whose case had been published by Dr. Rohé, a member of the American Dermatological Association.

Dr. James Nevins Hyde then read a paper entitled

Study of a Case of Acute Tubercular Leprosy.

following which a paper by Dr. H. D. Schmidt, of New Orleans,

On the Pathology of Leprosy,

was read, also by Dr. Hyde.

After the reading of these papers a discussion of the cases and of the general subject of leprosy ensued. The pathology of leprosy was also discussed at some length, some of the members inclining to the current tendency of belief in a fungous origin for the disease, while others maintained the greater probability of some obscure central nervous disturbance as being at the bottom of its causation.

The discussion was continued in the early portion of the evening session and was then followed by a paper by Dr. Edward Wigglesworth, of Boston, on

Buccal Ulcerations of Constitutional Origin,

the author discussing the ulcers due to cancer, tuberculosis and syphilis, together with their treatment. He urged extreme cleanliness in the treatment of syphilitic ulcerations of the mouth, and in addition to mercurial or mixed treatment suggested topical applications as very serviceable in hastening a cure.

THIRD DAY.

Dr. Charles Heitzmann, of New York, read a paper entitled

Clinical Experience in the Use of Oxy-Sulphuret of Calcium.

Dr. Heitzmann also read a paper

On Electrolysis in Epilation.

The credit of applying this method for the removal of superfluous hair belongs to a member of this Association, Dr. W. A. Hardaway, of St. Louis, who with Dr. Mitchell, the ophthalmologist, of this city, first introduced it into public notice. It has been the subject of frequent discussions before the Association, and has now become firmly established as an American method of treatment and the only successful one in these cases. Our dermatological brethren abroad appeared not even to have heard of the method, but were still blundering on with the old, imperfect and nearly useless methods of epilation. The writer then went on to give an account of his method of procedure, essentially the same as

Hardaway's,* with some modifications as the result of his personal experience.

In the discussion following. Dr. Jas. C. White questioned Dr. Heitzmann's assertion that the destructive influence on the hair is thermal. He thought it electrolytic. He had operated in a number of cases during the past year, using a current of fifteen cells. He placed the positive pole as near as possible to the needle which is attached to the negative pole. He usually found minute scars left after the operation, but not invariably.

Dr. Louis A. Duhring thought the action both thermic and electrolytic. He used a fine cambric needle, held by a peculiar holder, devised by himself, and described in the July number of the *American Journal of the Medical Sciences*. He thought that the operation demanded peculiar manual skill. He succeeded much better now than formerly.

The special committee on the examination of a specimen of ainhum, forwarded by Dr. Da Silva Lima, of Bahia, reported to the effect that the morbid process appeared to be an atrophy, due, possibly to the constricting influence of a ligature, although positive evidence was wanting.

A number of specimens illustrating the papers of Drs. Van Harlingen, Duhring, Atkinson, and Heitzmann were then exhibited under several microscopes and the pathological anatomy discussed.

The Association then adjourned to meet in Newport, R. I., on September 1st, 1882.

The officers for the current year are: President, James Nevins Hyde, of Chicago: Vice Presidents, George H. Fox, of New York, W. A. Hardaway, of St. Louis; Secretary, Arthur Van Harlingen, of Philadelphia; Treasurer, Isaac E. Atkinson, of Baltimore.

* For details of the operation see Dr. Hardaway's paper, in Philadelphia *Medical Times*, Feb. 14th, 1880.

THE INTERNATIONAL MEDICAL CONGRESS.

PROCEEDINGS OF SECTIONS.*

(*Concluded from p.* 320)

Section on Mental Diseases.

If the subjects brought forward may be taken as indicative of the current lines of observation in this specialty, it becomes interesting to compare the number of the pathological and clinical investigations with the almost entire absence of those of a therapeutic or preventive character.

The importance of this specialty was dwelt on by Dr. Lockhart Robertson in his opening address in the statement that there are in England alone 71,000 persons whom the law recognizes as of unsound mind, being one in 350 of the population. These figures would appear to be a strong plea in support of Dr. Clouston's advocacy, in a very able paper, for the extension of the teaching of mental diseases to students of medicine.

In the animated discussion on this paper, the consensus of opinion pointed to the necessity for a greater use of the county asylums for the purpose of instruction; that in this way only could opportunities be afforded to every student to enable each to obtain such an acquaintance with insanity as would prepare him to answer a question on this subject at his examination by the licensing bodies; and that a special course of study should be demanded of all medical men, who were empowered to sign certificates of insanity.

Dr. Bucknill, in his paper on "Testamentary Incapacity," specially discussed the recent decision in Banks *v.* Goodfellow, wherein the Court of Queen's Bench found a person capable of making a will, who was admittedly the subject of delusions of suspicion and persecution.

Dr. Maudsley pointed out that this was a sequence of similar American decisions, and commended the recognition of the ability of some cases of hallucinatory insanity to execute a will. In this opinion he was supported by Drs. Wood and Orange.

Dr. Motet, of Paris, alluded to the difficulty of deciding this question in cases of coarse brain disease with mental enfeeblement, and Dr. Bucknill quoted the case of a patient in a private asylum, who had lately, under his advice, executed a will with appropriate legal precautions.

The subject of Hypnotism was introduced by Professor Tamburini, who has, without doubt, taken the truly scientific method of examining in the most exhaustive manner the condition of the circulation, respiration, and muscular irritability, as well as the reactions of the senses during the hypnotic state. By this method only can deception and imposition be eliminated from this matter and the subject brought to have a definite scientific value.

Dr. A. Foville, in an interesting paper on "Megalomania," established two forms of exalted delusion; the first fleeting, inconsistent, and generalized, occurring in general paralysis, transiently in mania, in organic brain disease, and in alcoholism—in all these conditions being probably related to hyperæmia of the cortex of the brain. The second variety is systematic and permanent, chronic in evolution and incurable; usually associated with hallucinations, with delusions of persecution and exalted change of personality; and being especially associated with illegitimacy.

Professor Tamburini, in his paper entitled "Cerebral Localization and Hallucinations," stated that Panizza, in 1856, recognized the existence of a sensory centre (of sight) in the cortex cerebri, but that the full development of the discovery was due to Ferrier. He endeavored to prove that hallucinations are caused by disease of the sensory cortical centres.

Dr. Ferrier, in alluding to the distinct regions of special sense in the cortex cerebri, proved by his experiments before the present Congress, suggested that hallucinations should be regarded as sensory convulsions, analogous to those occurring in motor centres.

Dr. Alex. Robertson, in his communication on unilateral hallucinations, relegated their origin to the sensory centres, which, however, he did not at present consider to be satisfactorily mapped out.

Dr. Fournier attempted to prove that hallucinations differed only from ordinary acts of mem

* Prepared principally from the report in the *Lancet*.

ory in being involuntary and unconsciously originated. An abnormal stimulus thus arising in the cortex was transmitted to the optic thalami, and by reawaking of the activity of these organs gave rise to a false impression.

This theory met with very general opposition.

Dr. Fournier suggested the classification of hallucinations into those connected with: (1) the sensations of organic life; (2) the sensations connected with reproduction; (3) the sensations of the special senses; (4) the sensations produced by the voluntary activity of our organs, as by speech.

Dr. Motet's paper on Moral Traumatism in the Alcoholic had a medico-legal as well as a clinical interest in directing attention to the possible development of transient mania (not of the type of delirium tremens, but more nearly resembling the maniacal outbreaks after epilepsy) as a result of mental shock in a person of alcoholic habits.

Mental stupor was discussed in a valuable paper from Dr. Hack Tuke. He described three cases in which this condition was associated with catalepsy, and expressed the opinion that on a close examination most of these cases would be found to be due to melancholic absorption, and that in comparatively few was the mind an utter blank. He proposed to abolish the use of the term "acute dementia," using the term "mental stupor" instead, and adding the words "with melancholia," when this was associated.

Dr. Foville alluded to the fact that the term "acute dementia" was no longer used in France, and that only one condition was recognized. On the other hand, it was urged that there was a distinct difference between anergic stupor and stupor with melancholia, although in some cases the distinction was difficult, owing to the conditions closely approximating in the later stages of disorder.

Epilepsy was the subject of a demonstration by Dr. Lasègue, who described true epilepsy as being due to malformation of the skull, either idiopathic or traumatic; all other forms as being spurious, or epileptoid—*i. e.*, those due to cerebral traumatism, organic lesion, and toxic or hysteric conditions. The true epilepsy (excluding the traumatic) dependent on malformation of the skull, follows only on its ossification, and invariably develops between the ages of fourteen and eighteen years. The head is found, on examination and measurement, to be asymmetrical, either laterally or antero-posteriorly, and this is accompanied by asymmetry of the face, the mouth especially being askew (strabismus buccalis). This form is never hereditary, nor is it transmissible to offspring. The first attack of epilepsy is identical in character with all succeeding attacks, therein differing markedly from the epileptoid forms. The attacks of epilepsy occur between 4 and 7 A.M., during the passage from the sleeping to the waking state. These patients are epileptics in everything. Dr. Motet stated that Dr. Lasègue's views were generally accepted in Paris, but no discussion in confirmation or opposition followed.

The relations of insanity to Paralysis Agitans was treated by Dr. Ball, to Exophthalmic Goitre by Dr. Savage, and to Gout by Dr. Rayner.

From Dr. Ball's paper and the discussion thereon, in which several additional cases were quoted, the conclusion may be drawn that insanity with paralysis agitans is more common than the limited number of recorded cases would appear to indicate; Dr. Mercier expressing the opinion that the mental defect, being negative, was often overlooked.

Exophthalmic goitre was associated with insanity in three cases reported by Dr. Savage, who draws attention to the fact that symptoms of this disease may occur in general paralysis of the insane, and gave a case in which this diseased state recurred during attacks of mental disorder, being absent in the intervals, this case being markedly improved by hoscyamine.

Dr. Rayner quoted cases of insanity from retrocedent and latent gout, with others in which it was only an associated cause. The importance of the recognition of its presence with regard to prognosis and treatment was dwelt on, and a parallel drawn with the insanity resulting from lead and alcoholic blood-poisoning.

Dr. Savage has rendered good service to pathology in drawing attention to changes produced in nervous tissues prepared for microscopic section by hardening in spirit. These changes, he showed, are not to be distinguished from the so-called miliary degeneration. He also exhibited microscopic sections containing colloid and amyloid bodies, which were probably due to the mode of preparation. Dr. Benedikt expressed the opinion that the miliary bodies were normal, and not pathological. Dr. Holler, of Vienna, communicated a paper on a Method of Preparing Large Sections of human brains, of which he exhibited specimens. The process is a development of Sankey's method, large slices being stained in carmine-ammonia, placed in Canada balsam, dried on glasses, and pared with tenotomy knives to the required thinness. These sections would be useful for anatomical purposes, but for histological and pathological observation it may be objected that they do not take a uniform plane.

Dr. Benedikt exhibited a series of fifty brains of criminals, in which he discovered, as a marked characteristic, a general coalescence of the typical fissures. This deviation from the normal type he termed "atypic," the same condition being present in hereditary insanity, epilepsy and other low types of the human brain. Dr. Shuttleworth gave an interesting *résumé* of the cranial characteristics of idiocy, and Dr. Fletcher Beach exhibited brains of cretinoid and microcephalic cases, pointing out the close relation between the mental characteristics and the development of the convolutions. He quoted the observation he had made in common with Dr. Hilton Fagge, in cretinoid idiocy, that the thyroid body was absent, and was apparently supplemented by fatty growths in the posterior triangles of the neck. His microscopical sections showed the defect of processes in the motor cells of the brains of idiots.

On Diseases of the Skin.

Of the many diseases under consideration leprosy claimed a large share of notice. Four living examples were shown—two adults by Mr. Hut-

chinson, and two boys aged respectively eight and nine years by Dr. Radcliffe Crocker. All these had contracted the disease abroad, and the chief points of interest were the gradual dying out of the disease in an elderly woman, the primary outbreak in one of the boys six months after arrival in this country, and the failure of nerve-stretching to produce benefit in one case. Many wax models, photographs, and portraits of leprosy were on view in the museum from the collection of Dr. E. de Wahl, of Dorpat, and Guy's Hospital, etc., and an interesting series of specimens were shown from the Museum of the Royal College of Surgeons of Ireland, illustrating atrophy of the testes. Dr. Abraham also exhibited, under the microscope, excellent specimens showing degeneration of the glandular epithelium of the testes by the intertubular small-celled growth, hypertrophy of the sebaceous glands in the neighborhood of a leprous papule (leproma), the thickening of the walls of the sweat-gland, the accumulation of the small celled growth round the vessels in an anæsthetic macule, with subsequent fibroid degeneration and obliteration of the glands, the growth in nerves, giant cells undergoing vacuolation and fatty degeneration, the zoogloœa masses of Hansen and micro-organisms, and the thickening and infiltration of the coats of an artery as it entered a nodule. Mr. Malcolm Morris also showed some interesting specimens.

The preparations of ainhum and mycetoma were observed with great interest by many visitors who had not previously had an opportunity of seeing specimens. Lupus erythematosus was another disease which excited great attention, and all forms of lupus were copiously illustrated in the museum by Guy's Hospital models and Mr. Hutchinson's beautiful collection of drawings. Many living specimens also were exhibited, illustrating the several aspects of the disease, and the sites it selects for attack. Noticeable amongst these were two cases by Mr. Morrant Baker; three cases by Mr. Malcolm Morris, one showing very extensive distribution, and with difficulty, if at all, distinguishable from some forms of lupus vulgaris, and another illustrating the early stage named originally by Hebra seborrhœa congestiva; and several by Mr. Startin. Mr. Hutchinson also demonstrated the occurrence of lupus in mucous membranes, and this point was further illustrated on the palate of one of Mr. Morris's cases. An exciting and interesting discussion on this disease was opened in the section by Professor Kaposi and Dr. Th. Veiel, in which the President, Drs. Vidal, Unna, Schimmer, and Thin took part, and which turned principally on the distinct nature of lupus vulgaris and L. erythematosus, and on the excessively difficult histological and clinical point as to whether the latter was a new growth or an inflammation, its discoid and aggregate varieties as described by Kaposi, and its local or constitutional etiology. Professor Kaposi, supported by Mr. Wilson, is at variance in a great measure with many English observers, who hold the views expressed by Mr. Hutchinson. Altogether this meeting has been of the greatest service, if in no other point, at least in enabling all to understand the meaning of the terms applied to different phases of lupus, and what the questions at issue really are.

A third disease on which additional light was thrown was xanthelasma. Dr. Crocker showed a case of X. palpebrarum in a man suffering from diabetes insipidus. Mr. Startin exhibited a child five years old, apparently in perfect health, and without hepatic disease, in whom aggregated xanthelasma papules had existed symmetrically in the cleft of the nates, in the popliteal spaces, and on the elbows. This case closely corresponded with a unique one recorded by Dr. Colcott Fox, in *The Lancet*. Thirdly, Mr. Gaskoin showed a most interesting case in a healthy-looking man with symmetrical X. papulatum of the elbows and knees and backs of hands and forearms. This curious affection was illustrated in the museum by the Guy's Hospital and Mr. Hutchinson's drawings.

Great interest was excited by the exhibition of five cases of urticaria pigmentosa by Dr. Stephen Mackenzie (2), Dr. Colcott Fox (1), and Dr. Cavafy (1), all in children, and by Dr. Liveing, in an adult. Scleroderma, in its rare, diffused, and its commoner circumscribed forms (morphœa), was well illustrated. No less than three cases of the former were shown by Mr. Gaskoin, Dr. Colcott Fox, and Dr. Stowers, who read an account of his very chronic case to the section. Dr. Fox also showed a man suffering from the most widespread form of morphœa, which involved almost the whole of the trunk and limbs, but, curiously, not the face, as in the diffuse scleroderma cases. Mr. Baker exhibited two cases of morphœa, one involving the forehead and one the cheek; and it is interesting to notice in some of the beautiful series of drawings and models belonging to Mr. Hutchinson and Guy's Hospital the distribution in relation to the nerve supply, and more especially in its correspondence in this respect with herpes ophthalmicus. In connection with this point we noticed the transverse distribution of the patches on the leg in the Guy's Hospital model of linear atrophy. Of great interest were the cases of prurigo exhibited by Mr. Morrant Baker, because this disease has, since Hebra's description, been considered of exceptional rarity in England, and hence these cases were examined and Mr. Baker's paper listened to with much attention. It would appear that this disease is not so rare as was imagined, and the profession is much indebted to Mr. Baker for his work on this subject. Mr. Hutchinson's collection of drawings, illustrating bromide and iodide of potassium eruptions, attracted attention, and the same surgeon's portraits of rodent ulcer, of which Mr. Marsden also had drawings, which could be compared with the illustrations present of ordinary epithelioma. All the rodent ulcers portrayed were on the upper two-thirds of the face, except one on the back; and another point to be noticed is that one took on a fungating character, though otherwise typical. In the museum there were several portraits of the disease of the tongue, known as ichthyosis or psoriasis linguæ, one by Mr. Hayward having recurred as epithelioma after two operations, and another from the St. John's Hospital collection being associated with psoriasis of the left leg. The rare supervention of gangrene in various inflammatory eruptions was well illustrated, Mr. Hutchinson showing portraits of varicella gangrenosa,

vaccinia gangrenosa, herpes gangrenosa, and gangrene of a patch of bromide eruption; Mr. William Stokes, gangrenous patches following vaccination, though not of the primary sores; and two Guy's Hospital models, labeled rupia escharotica, representing probably varicella gangrenosa and pemphigus gangrenosa respectively. There remain for special mention a living example of leucoderma exhibited by Mr. Baker, proving conclusively the concurrence of both deposition and removal of pigment in this disease; another, shown by Dr. Crocker, to illustrate the pigmentation left by the eruption of lichen planus; by the same physician, a living specimen of a miliary papular syphilide, closely simulating lichen scrofulosorum, which Professor Kaposi stated he had seen in an adult; a patient with chronic eczema mammæ (malignant papillary dermatitis, Thin), by Dr. Colcott Fox, which was illustrated by two Middlesex Hospital specimens in the museum and by a portrait shown by Dr. Macnaughton Jones, in all of which cancer had supervened; two living specimens of elephantiasis arabum, affecting the hand and scrotum respectively, brought by Mr. Morrant Baker; a very curious affection of the scalp, looking very much like keloid, and enclosing in the growth brush-like bundles of hairs; lastly, two living examples illustrating affections of the hair, in one of which, shown by Mr. Hutchinson, the hair of a little girl had grown again quite white after shedding, following a severe attack of pityriasis rubra (there was also general loss of pigment), and in the other, a case of alopecia areata, shown by Dr. Sangster, in which the hair turned white in tufts before falling.

Dr. Vidal, of Paris, read a paper upon Parasitic Pityriasis Circinata and Marginata, in which he described a new parasite, the Microsporon Anomæon, and the clinical characters of the disease produced by it, pointing out the differential diagnosis from similar affections.

Dr. Angelucci read a paper on the etiology of the scales of psoriasis, eczema papulosum, and the horny septa between the lobules of molluscum contagiosum, pointing out the existence of a fungus which he had detected as the cause of the diseases above mentioned.

Dr. Alfred Sangster recorded the sequel of a case he had read at the Clinical Society in 1878 as one of Abortive Herpes. Its subsequent history had thrown doubt upon the genuineness of the eruption as due to disease. The author adduced facts to show that the onus of proof rested with those who believed in the artificial production of the eruption. He thought the case (if genuine) bore more resemblance to cases the President (Mr. Erasmus Wilson) had described as "Neurotic Excoriation." The patient was shown.

Dr. Eugene Verrier, of Paris, read a paper on the Influence of Climate, Difference of Race, and Mode of Life on the Development and Character of Parasitic Diseases of the Hairy Scalp.

Dr. Gustav Behrend, of Berlin, read an interesting paper on Vaccinal Eruptions, having devoted considerable attention to the subject in his capacity of public vaccinator. The author reported seven cases: five (pustular, herpetic, erythematous) appeared in the course of three days after vaccination; one, resembling measles, appeared on the eighth day. These eruptions are not caused by any specific action of vaccine lymph, similar ones being produced by drugs and articles of food. Any blood change, the author considered, may give rise to eruption (pyæmia, septicæmia), but predisposition was a necessary factor.

Dr. Rasori, of Rome, read a paper on General Inflammation of the Sweat-glands, following the prolonged internal administration of Pilocarpine. The paper included an account of a case, together with a review of the writings of authors on inflammation of the sweat-glands, and remarks upon the etiology of the disease.

Mr. Morrant Baker read a paper on Prurigo, or Eczematous Prurigo, or Pruriginous Eczema. Having shown such cases to the section on the clinical day, the author pointed out the frequent occurrence of a disease in this country usually confounded with eczema, but having characters of its own identifying it with the true prurigo (prurigo of Hebra).

Dr. Liveing read a paper on the Causes of Alopecia Areata. Having discussed the parasitic hypothesis, the author gave his reasons for supporting the neurotic origin of the disease, discussing—(1) The constitution of those liable to it; (2) functional nerve disturbances preceding and following loss of hair; (3) action of blistering fluid on the skin affected; (4) regions liable to the disease; (5) changes in the skin and hair; (6) allied diseases.

Professor Ernst Schwimmer read a paper on Leukoplakia buccalis, giving the name to an idiopathic affection of the mucous membrane of the mouth and tongue to distinguish it from symptomatic alterations occurring in the course of other diseases, especially syphilis. Such patches have been described as ichthyosis, tylosis, keratosis, psoriasis. The author described the condition and discussed its etiology and treatment.

Dr. Walter Smith, of Dublin, reported at length a case of the occurrence of Dipterous Larvæ beneath the skin. No cause could be assigned. Competent authority had pronounced the larvæ as belonging to a dipterous insect.

Dr. Unna, of Hamburg, read a critical and historical essay on the Sweat Secretion. In the course of his remarks the author pointed out that neither pathology nor physiology had shown that the sweat that exudes from the sweat-pores comes exclusively from the sweat-gland coil. The series of gradations between the ordinary sweat-glands and the anal, axillary, and ceruminous glands was alluded to. The watery elements of the sweat must be largely derived from the blood-vessels of the papillary layer, perhaps also from the vessels surrounding the duct and from the rete mucosum. We are thus led to a wider view of the sweat secretion, and to the idea of a division of labor among the different sweat-producing organs.

Dr. Alfred Sangster gave a short account of the histology of a curious Papillary Tumor of the Scalp. The paper was illustrated by specimens and drawings.

Dr. Herbert Stowers read a paper on a most interesting and rare case of Scleroderma diffusa. The author described most ably the various phe-

nomena of the case, such as the structural changes of the skin, the fixity of the joints, and shortening of bones. The paper was abundantly illustrated, and the patient was shown to the section on the clinical day.

Dr. George Thin read a paper on a case of Congenital Abnormality in the Hair-production on the Scalp. The hairs were described as rough and crisp to the touch, varying in length from a fraction of an inch to an inch in length, breaking off in numbers when the scalp is firmly rubbed.

Dr. Vidal introduced, by permission, a paper on Lymphadenoma of the Skin, and the President concluded with a short but remarkable paper on Dermato Therapœia.

Before the section separated, Dr. Bulkley, of New York, proposed that a committee be appointed, composed of members representing different countries, to simplify and amend the nomenclature of dermatology, and afterwards to agree upon a classification of cutaneous diseases. The proposal was seconded by Dr. Stephen Mackenzie, and carried by acclamation.

Section on State Medicine.

The chair in the section of State Medicine was taken by its president, Mr. John Simon, C.B. He delivered an able an interesting address, in which, after referring to the objects comprised under the term State Medicine, and the remarkable progress made of late years in all questions of public health, he discussed at some length the difficulties thrown in its way by the ill-judged legislation known under the title of the Cruelty to Animals Act, which he described as a heavy cloud overhanging the study of scientific medicine in England, and likely to be of specially disastrous effect on the progress of preventive medicine.

The preliminary arrangements and the address occupied so much time that the commencement of the reading of the papers was postponed till Thursday morning. The first question then brought under the consideration of the Section was the mode of the propagation of yellow fever and cholera, and the means best adapted to prevent their diffusion either from one country to another, or within any country. Dr. Billings communicated the results of the experience of late years in the United States. As regards yellow fever, he considered it as a specific disease capable of communication from person to person, and through the medium of clothing, etc. Inspector-General Lawson, on the contrary, in stating the results of his experience on the West Coast of Africa and in the West Indies, attributed its origin to local causes, and did not believe it capable of transmission by means of clothes, or other porous materials. Both these views found supporters in the discussion which followed. Dr. Billings was strongly in favor of quarantine, but did not include under that term detention of vessels on board of which cases had occurred for a longer period than might be necessary for the thorough cleansing of the vessel and the disinfecting of all articles of clothing; and he suggested the necessity for an international exchange of information when any outbreak of fever or cholera occurred. Attention was called by Dr. Fauvel, of Paris, to the very different climatic conditions of the various countries in which yellow fever occurs, and the consequent necessity for leaving to each country the arrangement of such details as it may consider necessary for the limitation of the disease. A paper was afterward read in abstract by Dr. Christie, on the measures by which to prevent the diffusion of Dengue. The author gave an account of several epidemics of this disease, and believed the only mode of prevention to consist in improved sanitary conditions.

The meeting of Friday morning was occupied with the question of the best means of preventing the diffusion of Syphilis. Several abstracts of papers on the subject were read, which led to a long, warm, but not very profitable discussion of the principles and operation of the Contagious Diseases Acts. This was going on when the hour for adjournment was reached, and the discussion was closed still unfinished. The afternoon sitting was devoted to the question of Home Contagia, as manifested by enteric fever, scarlet fever, measles, whooping-cough, diphtheria, etc. Professor de Chaumont read an abstract of an excellent paper on the principles to be observed in attempting to prevent the diffusion of disease, and was followed by an account, by Dr. Gilbert, of an outbreak of typhoid fever in Havre, apparently caused by defective drainage and sewerage arrangements; one by Dr. Stopford Taylor, on the importation of infectious disease into Liverpool, its diffusion, and the means of prevention; and an abstract of a paper by Dr. Page, on the prevention of the spread of scarlet fever, especially with reference to the period of incubation, the period during which the power of infection probably continues, and during which, consequently, isolation ought to be enforced, and the measures of disinfection and purification of persons, houses and clothing requisite after the occurrence of cases of the disease.

On Saturday the subject under consideration was the influence of various articles of food—not including water—in spreading parasitic, zymotic, tubercular, and other diseases. The probable transmission of tubercular disease to man from animals, through the medium of milk and meat, was brought forward by Dr. Creighton, of Cambridge; the occurrence of an acute specific disease from eating pork infected with a species of bacillus, by Drs. Ballard and Klein; and abstracts on the diffusion of diseases by various articles of food were read by Mr. Hart, Dr. Vacher, and Dr. Hogg; while Dr. Carpenter briefly brought to notice the freedom from disease-producing qualities of food, either animal or vegetable, raised from sewage-irrigated fields.

The meeting on Monday was opened with a paper by Dr. Ackland, on International Conditions of Admissibility to Practice, which gave rise to an animated discussion. He submitted that there are conditions under which a civilized country should give to holders of foreign diplomas privileges equal to those conferred on possessors of its own; that these conditions should not necessarily involve a reëxamination; that they need not be the same as between a mother country and her colonies, and that the granting of such privileges by a country need not imply reciprocity on the part of others. There appeared

to be nearly a general acceptance of Dr. Ackland's proposition that admission to practice should be governed by satisfactory evidence of qualification, professional and moral, altogether independent of any question of reciprocity. Dr. Ackland's paper was followed by an abstract of one by Dr. Rabagliati, on the precautions to be taken, in medical nomenclature and classification, to guard against false statistical conclusions, but from the very brief period allowed for the reading, and the extremely condensed form of the abstract, it was difficult to ascertain the full bearing of the paper. It elicited some remarks on the necessity for publishing tables of diseases *in extenso*, instead of giving merely classified abstracts.

Dr. H. Van Capelle gave an interesting account of the measures adopted in Holland to prevent the diffusion of hydrophobia, with their results, illustrated by maps showing the distribution of fatal cases of the disease among the population of Holland in each year from 1875 to 1880. Dr. Colam, who was fleet surgeon with the late Arctic Expedition, read a paper on the dog disease or canine madness of the Arctic regions, viewed in connection with hydrophobia, together with the measures used and suggested for its extinction. In the discussion which followed much importance was attached to stamping out the disease by the destruction of all dogs affected as soon as its existence is clearly ascertained. Mr. Dolan, who gave details of the prevalence of rabies in England, and its progressive increase during the last few years, urged the necessity for an efficient dog Act to enable this formidable disease to be brought under control, a suggestion which appeared to meet with the support of the section.

On Tuesday, after a paper by Dr. McCormack, of Belfast, on limiting the force of contagion and infection by holding the breath while in immediate contiguity with the sick, the discussion on Home Contagia, which had been postponed from Friday, was taken. Dr. Blaxall gave an account of an outbreak of cholera in the fleet at Malta, which afforded strong evidence of local origin, and both he and Dr. de Chaumont expressed decided opinions of the inadequacy of quarantine to ward off the disease in the absence of proper hygienic measures.

Of disinfectants, heat appeared to be the most relied on for the disinfection of clothing, bedding, and such articles, while fresh air, hot water, and sulphur fumigation were deemed most efficacious for buildings. The discussion was followed by an abstract of a paper by Dr. Carpenter, on sewage irrigation, which, in the absence of the author, gave rise to very few remarks. At the conclusion of this paper, Dr. Varrintrapp, after a well-merited eulogium on the valuable services which had been rendered by Mr. Simon to sanitary science, not in England only, but over the whole world, proposed a vote of thanks to him for the manner in which he had discharged his duties as president of the Section, and this, with a similar vote to the secretaries for their valuable and important services, having been unanimously accorded, the proceedings of the department of State Medicine were brought to a close.

Editorial Department.

Periscope.

Pains in the Feet.

In a paper read at the Boston Society of Medical Improvement (Boston *Journal*, No. 14), Dr. Curtis enumerated the various affections in which *pododynia* or *podalgia*, or painful affection of the feet, may exist independently of all signs of disease of the part itself. These are—1. *Urethral stricture*, as observed by Luxmoor, Brodie, and many others. 2. *Vesical calculus*. Pitha relates a remarkable case of a patient who was enabled, by the diminution of a sense of burning of the sole of the foot, to indicate precisely the progress of the diminution of the calculus by means of lithotrity. 3. *Cysto-prostatitis*, or inflammation of the neck of the bladder: In a case met with by Dr. Curtis, the pain in the neck of the bladder was accompanied in corresponding degree with pain in the feet of a similar character. 4. *Cystalgia*, or neuralgia of the neck of the bladder. Pitha is himself a well marked example of the co existence of the two affections. 5. *Gout*. Under this head the observations of Paget, Duckworth, and Weir Mitchell are referred to. 6. *Renal calculus* occasionally gives rise to pain irradiated to the heel. 7. Fournier and others describe this pain as occasionally met with in *syphilis* and gonorrhœa. 8. In *locomotor ataxy* the heel may be the first, or, for a while, the principal seat of the lancinating or boring pains characteristic of the first stages. 9. Prof. Gross describes an obscure form of pain in the feet, under the name *pododynia*, which is met with in certain sedentary classes of artisans, especially tailors.

Effects of Malaria in the System.

In a recent medical report from China, Dr. B. S. Ringer writes:—

I have now had frequent opportunities of observing that foreign residents in localities where so-called malarious influences exist may ward off their deleterious effects for a considerable period, even for years, but may suddenly, although living apparently under precisely similar circumstances, be seized with an attack of ague, or remittent fever, and with no further cause than one can discover than perhaps a slight chill or a very brief exposure to the sun, such as would usually be passed by without a thought; and in some cases absolutely nothing out of the ordinary routine of daily life can be called to mind by the

patient to account for the attack. My experience has further shown me that when once a patient has suffered severely from remittent or intermittent fever. it requires, as a rule, but a slight cause, such as getting wet or being exposed to the sun for but a short period, to start the blood poison fermenting, if I may so express it. and produce another attack. One or two instances of continued fever lasting for two or three weeks, with a high temperature. sometimes up to 103° or 104° Fahr., with no skin eruption, and apparently unaffected by medication, certainly not improved by quinine, have been under treatment. In these cases long exposure to the heat of the day seemed to be an exciting cause. All such cases as the foregoing are generally put down to the influence of malaria, from which it seems to me that our knowledge of the pathology of malarious disorders is at present somewhat imperfect; and much good work might, I think, be done in this direction by careful records of all such cases in different localities, with notes of habits of life and age of patients, condition of dwellings, influence of treatment etc.

A General Splint for the Lower Extremity.

We take from the *American Medical Bi weekly* a description of an ingenious general splint for the lower extremity. devised by Dr. A. Clendinen, of Fort Lee, N. J. He described it in an article read before the Bergen County Medical Society.

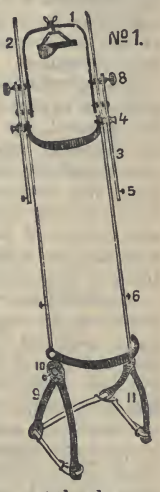
He stated that his experience in the army had made him adverse to the *flexed* position. He spoke of suspension as the first requirement, and of the various crude splints wherewith he had obtained it. He said that no suspensory splint yet introduced was of itself capable of counter extension. He spoke of the "anterior splint" of Dr. N. R. Smith, of its cheapness and simplicity, but said that the first objection to it was not only its flexion, but its, in fact, necessary flexion, without which we would be deprived of the popliteal hold for plasters, and traction for extension. This extension was, when effected, at the expense or give way of plasters above the line of fracture, if of the femur, but if of the tibia and fibula, there was in fact little extension practicable. The second objection was inadequate support of thigh, often resulting in angular deformity at point of fracture, sometimes directly caused by leverage on pelvis. After a citation of cases and statistics of shortening Dr. C. exhibited his splint and set forth his claims in the following language.

The presentation to the profession of a *General Lower Extremity Splint, entirely novel* in principle and in its arrangement, viz.:—

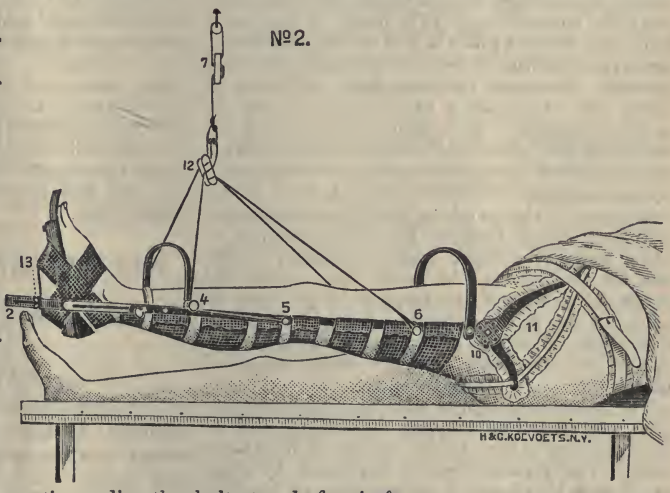
1st. In that, when in suspension, it, by weight of limb, is capable of extension and counter extension. (The average weight of limb of adult is twenty pounds—which is the average weight used for extension—and the average weight of limb of child is one pound per year—which also is the average weight used for extension.)

2d. In that with the comforts of suspension it is capable—as required—of little or no extension or counter-extension, but of *fixation* of hip joint, knee or other section."

Description.—The splint may be described as consisting of main frame, formed by two side pieces (of ½ inch by ⅜ inch iron) running from 2 to 10, plate No. 1, with two bowed cross braces, as seen at 4 and just in front of 10, plate No. 1. From 2 to 4 in this main frame is on each side a slot, in which slide a cross rivet, and a set screw, 8, plate No. 1, both connecting, with washers, between the *outside* pieces 3 to the *inside* or foot piece 1. (This slot is eight inches long, so the splint can be used for almost any adult limb). On the outside piece 3, at 5, is a knob for attachment of rope or cord, which passes forward and under pulley 4 (which revolves upon a rivet in brace) and thence through block 12, back to knob 6, on main frame. At 12 the angle of suspension can be set as thought proper, and from 12 to ceiling or other attachment the degree of elevation is regulated by block 7, plate No. 2.



Irons 9, plate No. 1, are attachable by screw bolt at end of main frame, and their angle is regulated by pin holes at 10. After setting of pin and tightening of set bolt, the horizontal position will be obligatory, but by the loosening of the same, as in tibia and fibular fractures, with counter extending plasters from below knee, section 10 resolves itself into a mere hinge of even bearing, allowing a free and harmless set-up by patient. The pieces forming triangle at hip joint, section 11, Plate 2, are bent at angles to suit the flesh



lines and are of different length and shape from those used on the inside, which are twisted to show a flat surface toward pubes and perineum, but these pieces can be used on either side, in order that the splint can be used for either limb. Particular attention is drawn to the fact that not only the hip joint, section 11, can be most comfortably *fixed* and controlled (the lack of which ability has often been realized in neck fractures, trochanteric impactions, etc.), but that by regulation of angle of rubber bearing from ends of 9, by set of pin at 10, the line of counter extension can effect in- or eversion of limb, which in some of the shaft fractures is, with proper elevation, very desirable.

The peculiarities of the foot piece are that, in addition to slot in outside iron and set screw at 13, plate 2, by which the foot may be raised or lowered, and limb in- or everted, by the above and below rectangular slots such attachment and comfortable bearing can be had above heel and over instep as to make unnecessary the attachment of plasters (which at any rate are comparatively useless in fractures of the lower third of tibia and fibula).

Application.—While the limb is resting on mattress, 9, irons with rubber tubing bearing upon cushions (hair), are adjusted to the parts and abdominal band and cushion in connection applied; and in hip joint troubles, triangle 11 has been additionally fixed by a piece of felting or pasteboard moulded to section and saturated with starch, plaster, or silicates, over which come the bearing of the irons and rubber. The bandages (which I used of hair cloth), are attached by pins to the one side of splint. The splint is next set over limb, and the bandages, one by one, drawn through and pinned to suit the limb lines; next the connection at 10 is made by the screw bolt, and the foot piece is slid up and hair bandage over stocking drawn out through slots and pinned. Set screw 8 is kept tight until angle of cords and of elevation has been, by blocks 12 and 7, arranged. It is then loosened and the weight of limb effects the extension by the carrying forward of foot piece and counter extension by back pressure of main frame at 10 on pelvic bearings. If the weight of limb is not sufficient, and no previous traction has been made, or in some cases of oblique fracture, extra pressure can for the moment be made upon splint and screw set at 8, or if the surgeon in any case be afraid of too much extension, he can, at proper extension, effect *fixation* by tightening set screw 8, and can constantly compare measurement of limb.

The pelvic bearings, in effecting counter extension, are of self adjustment, do not gall, and by the open angles circulation cannot be interfered with. The pressure can be regulated by angle at 12 and by elevation or lowering of head of bedstead.

Cerebral Excitement Caused by the Bromides.

Dr. Henry M. Bannister, in the *Journal of Nervous and Mental Disease*, July, 1881, speaks of this peculiar effect of the bromides, which he has had the opportunity to witness in one single case, that of a powerfully built man of about thirty years, in robust general health, but liable to frequent attacks of the *grand mal* for twenty-seven years, for which he has repeatedly been treated with the bromides with the effect of stopping his convulsions, but at the same time rendering him liable to attacks of genuine epileptic furore. Being somewhat curious in regard to these facts, Dr. B. resolved to observe the effects of the medicine upon the patient himself, and ordered for him Seguin's prescription of ten grains of the potassium and five grains of the ammonium bromide in an alkaline solution, three times a day. The effect on his general condition was excellent; there were none of the unpleasant phenomena of bromism, not even an acne pimple, so far as observed. The attacks, which had been as frequent as two or three a week, ceased almost entirely, his mind seemed to brighten, he became somewhat more active physically, his functions were all regular, his pulse was all the while normal, circulation and sleep good. But with this general physical and mental improvement in most respects, there gradually appeared an offensive self-importance and quarrelsomeness; and after some three weeks of the treatment he was a very disagreeable and decidedly dangerous lunatic; and after he had made an unprovoked assault upon an attendant, and had nearly torn the clothes off from him, it was not considered advisable to continue it any longer. The patient, a few days after the discontinuance of the medicine, was the same rational and manageable subject as before, with also the former frequency of his epileptic attacks.

Similar cases having been observed by Drs. Jewell and Kiernan, Dr. B. regards the fact that in these cases the suppression of the epileptic attacks by the bromides was accompanied by cerebral excitement and outburst of maniacal furore, as strongly suggestive that the attacks themselves are somewhat of the nature of a safety valve in some cases, and that the epilepsy is itself an alternative to acute and dangerous mania. The cerebral excitement is perhaps not to be ascribed directly to the medicine, but is secondary to its usual therapeutic effect, the suppression of the fits, and this may be the best explanation of the phenomena.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We overlooked the tasteful catalogue made up for presentation to the members of the International Medical Congress, by Messrs. Wm. Wood & Co. It is exceedingly neatly printed and bound.

——The inaugural address of Mr. Reginald Harrison, F.R.C.S., before the Liverpool Medical Institution, as its president, is a well written production. He spoke particularly of the benefit conferred by preventive medicine.

——"Trichinæ, How to Detect them and How to Avoid them," is the title of a popular ac-

count of these parasites, by Mr. John Phin, the able editor of the *American Journal of Microscopy*. It is intended for the use of farmers, pork dealers, butchers, etc., and contains a great deal of solid information, presented in a clear and pleasant manner. Published by the Bausch & Lomb Optical Company, Rochester, New York.

——The Century Co., publishers of *Scribner's* (to be known as "*The Century Magazine*" after October), will soon issue a portrait of Dr. Holland, its editor, which is said to be a remarkably fine likeness; it is the photograph of a life-size crayon-drawing of the head and shoulders, recently made by Wyatt Eaton, and will be about the size of the original picture. It is to be offered in connection with subscriptions to *The Century Magazine*.

——"Godey's Lady's Book," for September, is full of attractions. The steel plate is "Love and Duty," designed by Darley, and illustrates a scene in Dickens' novel, "Our Mutual Friend." The Colored Fashion Plate and the other numerous illustrations of the latest fashions are exceptionally good. There is the usual budget of short stories, poems and sketches, and a Diagram Pattern for the latest style of an early autumn wrap for ladies. We will furnish our own paper and the Lady's Book for the low price of 6.50 per annum. The publishers agree to start a subscription with any month you may select.

——The Medical Department of the University of Kansas City is out with its First Annual Announcement. Dr. Henry F. Hereford is President of the Faculty, and there is a formidable list of "Professors" in special departments. It is to have a three years' course, and the faculty announce their "platform" as follows:—

Their aim is to advance and elevate the standard of medical education in the West, and their purpose to place within the reach of all who may desire the best and fullest opportunities for acquiring medical knowledge. They believe that the science of medicine is not to be harmed by being too much taught, if taught well; and that the true way to protect the community against half-learned and unlearned doctors is to provide men well and thoroughly qualified in all branches of medicine and surgery.

——An essay on "Antiseptic Surgery," read by appointment before the Luzerne County (Pa.) Medical Society, by Dr. George W. Guthrie, of Wilkesbarre, Pa., is an interesting summary and review of the subject. The writer reaches the following conclusions:—

1. That for ordinary operations, in private practice, and in hospitals perfectly free from infectious diseases the exact Listerian method is not requisite—due attention to cleanliness secured by the use of disinfectants, clean sponges, clean instruments, and clean hands, with good drainage, will yield excellent results, without the more complicated dressing and the spray of Professor Lister.

2. That in operations of unusual gravity, such as opening the peritoneal cavity, the various operations for hernia, the opening of joints and the discharge of large abscesses, the surgeon who does not follow the exact Listerian method does not give his patient the benefit of the best resources of his profession.

3. That during the existence of erysipelas, pyæmia or hospital gangrene, the method in all its minutiæ should be employed, in all operations, great and small, as the evidence is conclusive that these diseases cannot exist in the presence of exact Listerism.

BOOK NOTICES.

A System of Surgery, Theoretical and Practical. In Treatises by various authors. Edited by T. Holmes, M.A. Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital, etc. etc. First American from Second English Edition, thoroughly revised and much enlarged. By John H. Packard, A.M., M.D., Surgeon to the Episcopal and St. Joseph's Hospitals, Philadelphia. Assisted by a large corps of the most eminent American Surgeons. In three vols., with many Illustrations. Vol. I. General Pathology; Morbid Processes; Injuries in General; Complications of Injuries; Injuries of Regions. Philadelphia: Henry C. Lea's Son & Co. 1881. 8vo. pp. 1007.

Great credit is due to the American editor and his co-laborers for revising and bringing within the easy reach of American surgeons a work which has been received with such universal favor on the other side of the Atlantic as Holmes' "System of Surgery." Like Reynolds' "System of Medicine," each article has been written by some one recognized as an authority on the subject of which he treats. Most of the English contributors are Hospital Surgeons in London, and most of them have written on subjects of their own choice. Since the publication of the first English edition, about ten years ago, great progress has been made in the department of surgery. Without materially changing the plan and arrangement of the first edition, such additions and alterations as recent researches and experience call for have, therefore, been made in the second edition, and from this, unaltered and unabridged (with two exceptions), the American edition has been prepared, the comments or additions of the American edi-

tors having been simply interpolated, inclosed in brackets. Some changes of arrangement have been made, the subjects being grouped more conveniently than in the English edition, and the material has been divided into three volumes instead of five. Volume I, now before us, contains subjects belonging to general surgery and injuries of regions. It is divided into five parts, under the general headings of "General Pathology," "Morbid Processes," "Injuries in General," "Complications of Injuries," and "Injuries of Regions," embracing thirty-four subjects, by as many authors. In the list of English contributors to the first volume we find the names of such well known surgeons as Sir James Paget, Simon, Savory, Callender, Barclay, and others equally distinguished, while among the American revisers we recognize men of no less celebrity. With regard to the mechanical execution of the work, neither pains nor money seem to have been spared by the publishers. Thus, in the way of illustrations, volume I contains, besides two hundred and forty five wood cuts, twelve beautifully executed chromo lithographic plates.

The Applied Anatomy of the Nervous System; being a Study of this Portion of the Human Body from a Standpoint of its General Interest and Practical Utility. Designed for use as a Text-book and a Work of Reference. By Ambrose L. Ranney, A.M., M.D., Adjunct Professor of Anatomy, and Late Lecturer on the Diseases of the Genito-Urinary Organs, and on Minor Surgery, in the Medical Department of the University of the City of New York, etc., etc. With numerous Illustrations. New York: D. Appleton & Company, 1, 3 and 5 Bond Street. 1881. Cloth. 8vo, pp. 500.

This work, we believe, supplies a—perhaps, not "long-felt," but rather recent—want, called forth by the unprecedentedly rapid advances made in neurological science during the past dozen years. It comprises a course of lectures which were delivered by the author before his class during the winter of 1880–81, and is intended to clear the way, as it were, for the practitioner and student who wish to follow the writings of the most earnest workers in this particular field, and thus keep themselves abreast of the progress of true scientific medicine, which so largely is based on the anatomy and physiology of the nervous system, and likewise to incite their interest and fit them for the pursuit of original research. A close and careful study of this work, we feel convinced, will impart to the student a large amount of practical knowledge which could not be gained elsewhere, except by wading through the enormous quantity of neurological literature which has appeared during past years, a task which few would have either time or inclination to accomplish. Here it will all be found condensed, simplified, and systematically arranged. The nature of the work is so fully explained in its title that little or nothing on that point need be said here. We will, however, say that the whole subject is treated in a lucid manner, and that, so far as we are able to judge, nothing seems left out which could in any way improve or add to the value of the book. Plain conversational language has been used throughout, and in order to impress important facts diagrammatic illustrations are used.

Treatment of Varicocele by Excision of Redundant Scrotum. Illustrated by New Instruments and an Account of Fifteen Successful Cases. By M. H. Henry, M.A., M.D., Late Surgeon-in-Chief to the State Emigrant Hospitals, Ward's Island, New York, etc. etc. New York: J. H. Vail & Co., 27 Great Jones Street. 1881. Cloth. 12mo. pp. 27. Price 50 cents.

On the twenty-first of April last the author read a paper on the above subject, before the Academy of Medicine of New York, which paper appeared in the *Medical Record*, May 28th. By the request of friends and correspondents the author now presents the subject in book form, with the hope that this method of treating varicocele, which in his hands has proved so successful, may be more extensively tried and found equally advantageous. The operation which he describes is easy of performance, and strikes us as an improvement on other procedures.

General Medical Chemistry, for the Use of Practitioners of Medicine. By R. A. Witthaus, A.M., M.D., Professor of Chemistry and Toxicology in the Medical Department of the University of Vermont, etc. New York: William Wood & Co., 27 Great Jones street, 1881. Cloth, 8vo, pp. 443.

This is the volume for August of Wood's Standard Medical Authors. It differs from other works on chemistry in not separating organic from inorganic chemistry, but treating of the former simply as the chemistry of the compounds of carbon. The author has, we think, succeeded fairly in presenting what every practitioner should know of the science of chemistry, but the absence of illustrations will detract materially from the value of the work, and it can never take the place of other text-books on the subject. All weights and measures are given in the metric system, and temperatures in degrees of the Centigrade scale.

THE

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THE SPECIALTY OF HYDRO-THERAPY.

Although confessedly abreast of our European colleagues in most branches of medicine, there is one in which we of the United States must acknowledge that we are far behind. This is the department of Balneology, or Balneo-therapeutics, including the scientific knowledge and use of mineral springs and waters. There is, indeed, a considerable amount read and heard about them in our newspapers and journals, but it requires only a slight examination to perceive how superficially this specialty is cultivated in America. Most of what is done in it is for purely commercial reasons and in an exclusively commercial spirit. There is very little reliance to be placed on the published analyses, and the crude therapeutic claims put forward in the circulars of hotel proprietors and agents for the sale of the waters are usually utterly beneath serious notice.

How different is this in the Old World! As was recently remarked in an address by Professor CHARTERIS, of Glasgow—

No course of lectures on therapeutics could now be deemed complete which did not deal with the health resorts of Europe. He would not attribute to them any wonderful or mysterious properties. He would not intimate that old saints hovered over their springs, and that the blessing of guardian angels consecrated each glassful; but yet he would tell them that against chronic diseases, the whole tribe of ailments connected with digestion or nervous exhaustion, they possess healing virtues as manifest and as clear as the sparkling water they bear to the surface. The gouty deposits are dissolved by the neutral baths of Wildbad, and the rheumatic joints are supplied by the hot springs of Wiesbaden. The Strudel, of Carlsbad has stood the test of four centuries, and has ever been effectual in reducing the engorged liver and the swollen spleen, while its alkaline properties show that it probably is the best medicinal remedy for diabetes. For the enervated statesman, the tired litterateur, the dyspeptic man of business, there is no tonic so potent as some of these revivifying waters, with their pleasant and care-dispelling surroundings.

The Germans are, perhaps, the greatest enthusiasts in this respect. The balneological literature of Germany is immense, and the map of the Empire is dotted all over with health establishments in connection with mineral springs. All classes look upon a few weeks at these resorts as one of the greatest pleasures, and also one of the most imperative necessities of comfortable existence. We have been told that the ladies of Zurich are so wide awake on this point that they have inserted in the marriage contract a stipulation that their husbands are to send them, for a certain length of time each summer, to one of these springs.

The last edition of Dr. MEYER'S little manual, *Anleitung Zur Wahl der Curorte*, gives a list of the "better known" medicinal springs of Central Europe and France. We have had the curiosity to count them, and find he reckons up *four hundred and twenty-six*, besides a long list of cold water, or simply hydropathic establishments!

At nearly all these springs there is a capable

resident physician; the waters have been accurately analyzed by competent chemists; the class of diseases for which they are best suited have been closely studied; and the circulars which they send out are much more in accordance with the spirit of proper professional accuracy than those mercantile advertisements which we receive from "mineral water agencies" in this country.

There is now going on an International Balneological Exhibition at Frankfort-on-the-Main, as part of an exhibition of German patents and patterns. This exhibition consists of the salts, mineral waters, artificial preparations, analyses, maps, and general descriptions of the baths in question. It is open until the beginning of October, possibly longer. Almost all European countries are represented, the chief contingent of the 169 numbers being naturally German, Swiss and Austrian. The Hungarian and Spanish divisions are exhibited by their respective governments. The whole, including the catalogue, is carefully arranged, and is said by those who have visited it to be very instructive.

There are three or more journals in Germany and France devoted to this specialty, and the *Jahrbuch für Balneologie*, edited annually by Dr. E. H. Kisch, of Marienbad, has now been regularly issued for ten years, and is a valuable compendium of current progress in all departments of this branch, including hydrology, medical climatology, aërotherapy, etc.

The papers in the journals above referred to are by no means confined to strictly balneological questions. In a Vienna one the operation of electricity and the action of climatic cures, for instance, are discussed at large. One is much struck with the breadth and extent which the subject is assuming in all its branches. This is also very observable in the proceedings of the balneological section of the Society of Medicine, which has just held its third meeting at Berlin, when, among others, papers were read on the History of Climatic Cures, on the Use of Whey, a very elaborate one on Digestion, and another on the Relation of Government to Bath Establishments.

With the numerous and undeveloped resources that the United States possess in this direction, it is to be hoped that more attention will be devoted to this branch in future.

Notes and Comments.

Hysteric Coxalgia Cured by the Magnet.

M. Brachet, physician at Aix-les-Bains, reports in the *Progrès Médical* (July 23d), a case of great interest. In 1879, a young Scotch lady came to the watering place suffering from a pain, supposed to be rheumatism, located in the right ovarian region. This pain was intense, and the slightest pressure of clothing etc., over the part was sufficient to provoke an exacerbation in its intensity. Careful consideration of the case led to the belief that it was of hysteric origin, and a powerful magnet was applied one half hour daily; after fifteen sèances of this treatment the pain had completely disappeared.

The patient, shortly after, returned to live in a cold and humid climate, and six months later commenced to suffer from a veritable coxalgia. She was treated for an inflammatory affection of the hip-joint, placed for forty days in an apparatus, then underwent various forms of treatment, remaining for six months completely at rest. She was brought again to Aix-les-Bains, and it was found that she had lost flesh, become chloro-anæmic, suffered from intense nervous excitability and sleeplessness, with disgust for all kinds of food. There was continuous and intense pain in the right hip-joint, becoming more violent on attempts at walking; and more marked in the evening. When the patient attempted to stand there was great feebleness in the articulation, and marked hyperæsthesia about the joint. The pain, etc., all became exaggerated at the menstrual period, the patient also suffering at such times from dysmenorrhœa.

The diagnosis in the case was difficult, but M. Brachet, in consultation with M. Proust, came finally to the conclusion that the coxalgia was of hysteric origin, for the following reasons: The patient had already suffered from hysteric manifestations; there was no cause, either hereditary or traumatic, for disease of the joint; the pain was not constantly the same, remitting at times in intensity; very little pain was induced by pressure over the great trochanter, while simple pressure on the skin provoked intense pain; the absence of pain at the antero-superior aspect of the thigh, under Poupart's ligament; again, there was no peri-articular swelling, and no febrile

manifestation, notwithstanding the atony of the stomach.

With this view of the case, it was determined to make use of the magnet, and a powerful one was fixed so that the poles were about five centimeters distant from the hip, and retained in place for two or three hours. After two days the patient was much less irritable and was able to rest well. This treatment was continued; the improvement was slow, but sure, not very sudden, as often happens in hysteric coxalgia, and after two months the patient was completely cured, so as to be able to use the limb in every sort of exercise.

The Prophylactic Power of Vaccination and the Value of Re-vaccination.

Dr. W. M. Welch, in a paper read before the Philadelphia County Medical Society, May 25th, 1881, and published in the Philadelphia *Medical Times*, informs us, that in Sweden, during the pre-vaccinal period, from 1774, to 1801, the annual average of deaths per million of inhabitants from smallpox was 1973; after vaccination was introduced, but was not obligatory—1802 to 1816—the annual average per million inhabitants was 479; and after vaccination was made compulsory, during the period from 1817 to 1877, the annual average of deaths from smallpox per million of population was only 181. This shows an annual saving of life of 1792 persons out of every million of the population, by vaccination, and fully justifies the law making it compulsory.

He further states that according to his experience, smallpox after thorough vaccination rarely occurs within the first seven or eight years of life, and that up to this age death never results, unless from some complication. But from this age up to the period of puberty the number of cases increase, and death is not infrequent. During the period of youth and adolescence the number of cases very greatly increase, and death becomes quite common. Within the period of life from fifteen to thirty-five years of age post vaccinal smallpox is of exceedingly frequent occurrence, even when the vaccination of infancy has been most thorough and complete.

The occurrence of smallpox in those who have been successfully re-vaccinated, he says, is extremely rare.

In the experience of the medical superintendents of the several smallpox hospitals of London, during the period from 1876 to 1879, when 11,412 cases of smallpox occurred among vaccinated persons, *not one case* occurred, within the cognizance of either of the medical superintendents, of any person who had been efficiently vaccinated and successfully re-vaccinated. Of the nurses and servants employed at the various hospitals, numbering about one thousand, some half dozen only contracted the disease, and these, for some cause or other, escaped re-vaccination before entering the wards.

This is entirely in accordance with the author's own experience, and he, therefore, maintains that the sooner the profession recognizes the fact that a vaccine cicatrix, however typical, resulting from vaccination in infancy, is not proof of immunity from smallpox throughout life, the better it will be for the protection of the public against the constantly-recurring epidemics of smallpox, because it would lead to a more general practice of re-vaccination.

The Etiology and Treatment of Inebriety.

Dr. Chas. Warrington Earle, physician to the Washingtonian Home, Chicago, contributes to the Chicago *Medical Journal and Examiner* some valuable thoughts on the above subject. Dr. Earle is not a believer in inebriety as a disease, and he affirms that ninety-nine out of every hundred men who have formed the habit of drinking *can* reform if they desire, while the remaining one per cent. are probably insane, and should not be held accountable. He also states that a close analysis of more than 2500 cases has convinced him that a man who has drank ten, twenty or thirty years stops just as easy as one who has been addicted to alcoholic excess for a single month. Chief among the causes of drunkenness he places *ignorance of the effects of alcohol, idleness, association with drinking companions* and *sociability*, or the custom of "treating." He also enumerates various other causes, such as *trouble*, etc., but these chiefly operate in causing relapses where the habit has once been formed. His only hope of reform is in the *education of the young* and in the strict enforcement of the laws relating to the sale of liquor to minors, as the great mass of those addicted to intemperance will never be temperate citizens, but will have spasmodic periods of teetotalism, only to succumb to the appetite and lapse into their former habits. Of those who have already contracted the habit, he thinks that about twenty per cent. strive honestly to reform and are willing to accept the means which will produce it; these can be reformed the first time their attention can be arrested long enough to keep them perfectly sober. The remaining

eighty per cent. may be regarded as incorrigible by ordinary means, and should be dealt with accordingly. The State should assume the guardanship of this class, and should put them in an institution whose management should be remarkable for its kind administration of affairs, and for a discipline most rigid. This institution should be situated on a farm, and men of this class sent there, for not less than two years. From ten to twelve hours' work every day during this time of commitment, combined with judicious and strict dicipline, with the assurance that the State would again assume charge of them if they returned to their former habits, would produce an effect on these men, which would result in the reformation of nearly all.

Treatment of Typhoid Pleurisy.

In a recent article in the *Revue de Therapeutique*, Dr. Goumy, writes, on the very fatal disease known as typhoid pleurisy. His suggestions for treatment are to keep up the general condition of the patient by hygienic measures; tonics, in large doses, given at an early stage, are the most urgent indication. Subsequently, the pleural liquid must be evacuated as early as possible. One puncture is made, then a second, and if the general condition do not improve, pleurotomy is resorted to. Professor Bouchard is greatly in favor of this treatment; two out of three cases under his care recovered under this treatment. The incision of the thoracic wall disengages the lung, and favors its gradual and progressive expansion. Antiseptic washings-out prevent any danger of putrid infection; for this purpose, carbolic acid, sulphate of zinc, a three per cent. solution of salicylic acid, which has been employed by Potain, and a five per thousand of chloral, which has been employed by Villemin, are all recommended. According to the recent statistics compiled by Robert, pleurotomy has yielded 78 cures out of 114 cases. These figures are satisfactory, especially if the frequency of symptomatic pleurisy be taken into account.

The Purity of Philadelphia Water Compared with London Water.

In a paper read before the Philadelphia County Medical Society, June 22d, 1881, and published in the *Medical Times*, Dr. Henry Leffmann remarks that examination, made at various times during the winter and spring, have shown that the Schuylkill water is of fair quality and cannot be regarded as an active cause of disease in our city. It is an insipid water, lacking the pleasant taste and sparkling character of spring water, especially of the so-called hard waters, and this lack is often taken as evidence of impurity. During the periods of freshet it becomes quite turbid, from the suspension of particles, mostly silicious; but such suspended matter rarely exceeds a grain or two to the gallon, and the individual particles are too minute to cause any irritation. In the turbid water several species of harmless animalcula can usually be detected. He then gives the following comparison of a recent analysis of Schuylkill water with that of two samples of London water analyzed by the same method and considered excellent waters:—

	Schuylkill.	*Kent Company, London.*	*Chelsea, London.*
Chlorine	0.53	1.2	0.51
Ammonia, from organic matter	0.0023	0.0022	0.0035
Total solids	7.00	34.00	17.64

All the figures are grains to the imperial gallon.

In regard to Delaware water he states that, so far as he has examined it, it is not as good as the Schuylkill water. The amount of organic matter is higher, and the microscopic examination shows forms of life which are frequent in decomposing materials.

Covering Nauseous Medicines.

Dr. Stillwell, after protesting (*Med. Times*) against the prevalent practice of prescribing very nauseous medicines in unnecessary bulk, supplies a formula for an elixir that he keeps prepared, half an ounce of which added to a four ounce mixture containing disagreeably tasting medicines (as bromide and iodide of potassium, bichloride of potassium, or sodium, sulphate of quinine etc.), covers a multitude of imperfections in a prescription, as regards color, taste etc.

℞	Cort. aurant. rec.,	ʒ j
	Sem. anisi. contus.,	ʒ ij
	Sem. cardam. contus.,	ʒ j
	Sem. fœniculi,	ʒ ij
	Cocci. cacti,	ʒ j
	Sacchar. alb.,	ʒ xxxvj
	Spt. vini rec.,	ʒ iv
	Aquæ,	Oiss.

Macerate in the alcohol and water for four days, filter and dissolve the sugar by the aid of a gentle heat, and strain while warm.

Fatal Poisoning by Inhalation of Carbolic Acid.

Dr. F. P. Blake, of Canon City, Colorado, reports, in the *Rocky Mountain Medical Review*, for July, 1881, the case of a lady, aged 29½ years, married and near the full term of pregnancy, who was found dead in bed. A handkerchief enclosing a sponge was in close proximity to her face,

which was cyanosed. The tip of the nose was blistered, from contact with the substance contained in the inhaler. And odor of carbolic acid pervaded the room; the sponge and handkerchief were saturated with the odor, though dry when found. No one was in the room when the woman died. She was subject to neuralgia, and it is supposed that she sought relief by inhaling the acid, which asphyxiated her.

The appearance of the mouth did not indicate that the acid had been taken internally.

CORRESPONDENCE.

Labor Complicated with Measles.

ED. MED. AND SURG. REPORTER:—

The following case presents several peculiar features which I believe may interest your readers:—

Was called April 30th, 1881, to see a child of T. M., having measles; rash out well, and case doing well. While there the mother informed me of her approaching confinement, which she expected in about two weeks, and of her dread of the measles, as she never had them. Quieted her apprehensions as best I could under the circumstances. Called May 1st, when another of the children was complaining; also on May 2d, when still another child was putting on an appearance of measles; gave them the usual remedies. May 5th was called to see the mother, who was complaining of headache, pains in back and limbs, with the rash just appearing through the skin; she was a woman of phlegmatic temperament, rather masculine, stolid and indifferent, and from the lower walks of life, aged 29. Ordered her bowels to be moved once a day, with castor oil, Dover's powder, in seven-grain doses, to be given three times per day, and to stay in bed.

May 7th. Was called at 4 A.M. to see Mrs. M. (the mother) who was in labor. Child born at 7½ A.M., with white patches all over its body, which upon washing became the red eruption of measles; labor terminated naturally and easy; her previous ones had been tedious; left mother and child doing well; eruption on both well out. Temperature of mother 99° in axilla, 100° under tongue; pulse 90. Ordered all soiled clothing to be removed from mother and bed; left a brisk cathartic of calomel and gamboge, to be given after the mother had time to rest.

May 8th, 2 P.M. Pulse 140, temperature 103°; rash well out. Considerable bronchitis; respirations 28; headache; passed a restless night; bowels open; passed urine; no pain or tenderness about bowels. Uterus contracted down well. Put her on tincture verat. viride (Norwood's), four drops every two hours, with seven grains Dover's powder every four hours. Ordered her to be sponged off frequently with tepid water; wanted to bleed her, but met with so much opposition that I had to relinquish it.

May 9th, 10 A.M. Temperature 102½°, pulse 140, full and strong; slept well during the night; passed urine; lochial discharge all right; child put to the breast; scanty secretion of milk; no tenderness on pressure over bowels; no tympanitis; headache gone: cough troublesome; complains of getting nothing up. Increased verat. viride to five drops every two hours; added three grains carbonate ammonia to the Dover's, to increase its expectorant powers; took some of the urine home with me; analyzed, but found no albumen.

May 10th, 8 A.M. Temperature 102°, pulse 120; rash still on well; expectorates a frothy mucus quite freely; passed quite an easy night. Her husband succeeded in getting an old nurse to come and take care of her; ordered the sponging to be kept up; increased ver. vir. to six drops every two hours; kept her on the Dover's and carb. ammonia as before; bowels to be moved every day, either with syringe or a cathartic.

6 P.M. Temperature 104½°, pulse 140; rash out well; very hot and uncomfortable; does not complain of pain anywhere. On examination of lungs do not find very much bronchitis but still expectorates quite a quantity of frothy mucus; passed urine; lochial discharge all right; secretion of milk about stopped; increased ver. vir. to six drops every hour; kept her on Dover's as before.

May 11th, 8 A.M. Temperature 101½°, pulse 90; rash still out well; passed a comfortable night. Urine passed; bowels open.

7 P.M. Temperature 102°½, pulse 96; rash fading on face and neck, and becoming dark colored on back, from pressure and heat.

May 12th, 8 A.M. Temperature 101°, pulse 84; passed a comfortable night. Urine passed as usual, which upon analysis yielded no albumen. Meeting Dr. A. M. Heyman, of Butler, called his attention to the case and to the large doses ver. vir. exhibited; he expressed surprise that it had not produced nausea, and thought it could not be of good quality, also thought treatment ought to be decidedly antiphlogistic.

7 P.M. Temperature 103½°, pulse 180. On my visit in the morning, fearing the toxic effects of the ver. vir., I ordered the nurse to give it every two hours, but through mistake it was not given at all. Pulse full and strong; asking again for permission to bleed her, was refused. Put her back on six drops ver. vir. every hour, until pulse brought down to 70. Considerable pulmonary engorgement; expectorates quite a quantity mucus; complains of something choking her; lochial discharge becoming paler, but not offensive; bowels open. A short time after I was there she took a paroxysm of retching and expelled two large lumbricoid worms, after which she rested very comfortably.

May 13th. Called Dr. N. M. Hoover in consultation. 8 A.M. Found woman sitting up in bed eating breakfast; temperature 100° pulse 72°; no pain or tenderness anywhere; uterus contracted down well; urine passed all right; lochial discharge becoming scanty; rash beginning to fade on the body. On consultation decided to keep her on the same, but reduced dose to four drops every two hours. Doveri to be given as before.

5 P.M. Temperature 100½°, pulse 76°; rested well all day; bowels moved with syringe; complaining of flatulency; ordered spts. turpentine added to injection; reduced ver. vir. to four drops ever four hours.

May 14th. 1 P.M. Patient sitting up in bed washing herself; expressed herself as being about well; temperature 99°, pulse 76°; eating well; bowels moved by dose of castor oil; rash has about faded; urine passed normally; considerable expectoration of mucus; air entering all parts very well. About an hour after my leaving she wished to get up on the rocking chair, where the nurse allowed her to remain for three hours; upon being put back to bed she turned over on her side, gave a few gasps and was dead.

An ordinary dose of verat. viride had no effect; a larger one only weakened the action of the heart without reducing its frequency, and it was only by giving large and sustained doses that the lungs could have comparative rest; no nausea or vomiting followed. Was death due to heart clot?

The baby is doing as well as could be expected from one in its situation; the rash began to fade on the fourth day after birth; it had some bronchitis, with suffusion of the eyes; is delicate; weighs about seven pounds; a girl.

Were mother and child attacked simultaneously?

B. A. HENLEN, M.D.

North Hope, Pa., May 26th, 1881.

Honesty Among Physicians.

ED. MED. AND SURG. REPORTER:—

In your issue of September 3d some scathing charges against physicians, without exceptions, are cast into the teeth of the profession; charges that should be met and refuted by every respectable doctor in the land, and for good reasons.

In the first place, the sources of those charges are fallacious. A surgical instrument maker lives in a glass house, built and rented to him by the medical profession. And I will leave it to the honest judgment of every man capable of judging, if all surgical instruments could not be made for one-third the current price, and a handsome profit of one hundred per cent. still be realized thereon. I have been in the profession as a practicing physician for fifteen years, am acquainted with scores, yes hundreds of doctors, have ordered a great many instruments myself, and know of many more that were ordered; and I have yet to observe the first digression from strictly honorable dealing on the part of the physician, while numerous instances have occurred where the honest (?) "instrument maker" has failed to fulfill the spirit if not the letter of his contract.

On my desk, as I write, is an appliance for which I paid fourteen dollars, that is worthless, on account of the ignorance or inability of the maker. (The material and labor would have yielded an immense profit at four dollars.) I once went into an instrument maker's shop in New York City, and paid four dollars for having two feet of rubber tubing and a trocar attached to my stomach pump, to act as an aspirator. The whole thing would pay at sixty two and a half cents, as the commerce of the world goes.

A uterine probe at my elbow cost me *two* dollars and fifty cents; not as much mechanism about it as a common table fork, which are sold at *one* dollar and fifty cents a *dozen*. Yet these exacting Shylocks feel disposed to dictate a course of honesty to us, and howl if some of us are too wide awake to be gulled to their heart's content. All men doing business with the public must expect mistreatment and losses. But physicians, as a class, who are struggling against all manner of malevolent treatment, and are generally poor men, will pay more honest debts than any other class of men in like circumstances, or, I might say, any circumstances.

Your other source of information is a man of the old dispensation, "an eye for an eye and a tooth for a tooth;" "evil for evil." He justifies the practice of deception because he has been deceived. If he is base enough to get his bread and butter by what he terms "deception" and "base arts," he should be ashamed to tell it, much less that such a thing should go into print. In an experience of fifteen years I have not found it necessary to resort to the pretensions, deceit, etc., that he speaks of, neither do a great many doctors of my acquaintance. I despise a man who does so. I have more confidence in the members of our noble profession than to believe this of them. They are a toilsome, long-suffering, honest class, in the aggregate. True, another has sometimes taken my case out of my hands because I told the truth, that it was incurable, but I have never known such an incident that did not redound to the honor of the party who was honest.

The man who deems it necessary to become an "habitual liar" to obtain bread and butter, is not what his profession intended him to be.

What he says about people not paying doctor bills, is exactly correct. Still, it is partly our own fault, and may, in a measure, be remedied. A competitor once disparagingly said of me, to a friend: "If you employ Kimmel one day, he will hand in his bill the next?" That is just the reputation every doctor should have. People should understand that you expect to and *must* be paid, and well paid, for your services, and then we, as a profession, will be allotted the proper dignity.

There is too much maudlin sentimentality about the payment of our claims. In our town, every man who disregards the paying of his doctor is branded a "dead beat" and his name and residence passed around to all the physicians and carefully preserved in a book, in alphabetical order, for future reference. In this country we have very few of "God's poor"; and for these we are willing to work gratis. But it is the "poor man" who has the ready money with which to buy whisky, bet on races, keep fast horses, that we complain of for not paying his doctor bills.

Brethren, let us not cut great gashes in our own flesh, for self punishment; the laity will do enough of that.

J. A. KIMMEL, M.D.

Findlay, Ohio.

[Our correspondent's logic is as follows: In the first place, the instrument maker was paid; secondly, he did not deserve to be paid; thirdly, if he was not paid, he got his deserts, because he sold at a large profit! It is just such reasoning and such readiness to excuse an absence of strict commercial integrity that our friend, the instrument maker criticised, as too common among physicians.—ED. REPORTER.]

Reform Among Druggists and Doctors.

ED. MED. AND SURG. REPORTER:—

A recognized question of the day, viz: "The relations of the medical profession to patent medicine and allied manufactures, renewals of physicians' prescriptions, counter prescribing, etc.," manifestly presents *business* features that are inseparable from the ethical and moral importance of the subject.

The Medico legal Society have been giving this very important question some study, and have endeavored to take a step or two toward the promotion of some needful inter-professional reform.

The committee who were more directly engaged in this task have neither anticipated nor craved exemption from criticism, inasmuch as it was hoped that enlarged comprehension of the subject under consideration would suggest many wise and just methods for a practical correction of various abuses and irregularities. The field is a wide one, and open to the work and co-operation of all who desire the substantial, practical advancement, usefulness and support of the profession of medicine in this country.

But is it not a rather capricious shifting of the cardinal point from sight, when criticism represents the Medico-legal Society as urging that *the reason* the profession should oppose patent medicines, etc., is because, "they encroach on the province of the regular practitioner?" Is it quite fair to separate a segment from the clearly expressed context of reasoning, and project *that* as the sum of the whole cause or the wheel upon which all argument is turned?

The encroachments of patent and other ready-made panaceary on the province of the regular practitioner are many and great. But I have never seen anything in print that emanated from the Medico-legal Society representing these business encroachments as *the reason*, but rather as *a reason*, one reason among others, not the least of which is the great harm sustained by the public through the risky and intemperate use of nostrums.

If a regularly educated medical profession be the right thing *per se*, then it is also right and necessary that such a medical profession shall be enabled to legitimately and honorably sustain itself against every contraband agency that systematically cuts off the professional province.

The evils so apparent to the thoughtful practitioner are evils of business practices in contradistinction to mere sentimental cognizances. Out of the injurious business practices grow the physical and moral injuriousness long ago recognized by the framers of the medical code. The business feature of this question, as presented in the deliberations of the Medico-legal Society, has not the narrow reference to individual calls for advice and the compensating dollar; it has reference to right principles of practice or wrong principles, to right support or negative support, to priority, province, or the money prestige of advertising monopoly.

It has been conceded over and over again that correction of the evils under contemplation is comparatively impracticable without mutual understanding and coöperation on the part of physicians and pharmacists. If, therefore, any number of these can agree on some mode of co-operation in a matter so important, can *that* be rationally construed into a "letting down" of the professional tone? Is it not rather getting professional tone up to a plane of courageousness that is enheartening to the timid and despondent?

By means of a canvass of considerable extent, it has been recently ascertained that thirty-four druggists and one hundred and thirty-four physicians have indicated their readiness to sustain each other in efforts looking towards interprofessional reforms. We submit that the numerical gain from a committee of less than half a dozen men to one hundred and sixty-eight, on a first introduction of so complicated a subject, is no mean progress in the emancipation of professional sentiment. If physicians must live, they should live by their profession. Whenever physicians get upon a "home protection" hard-pan, they will be in wholesome attitude to promote the public welfare against the injurious and fraudulent nature of all panacea enterprises.

Philad'a. G. B. H. SWAYZE, M.D.

Ergot in Labor.

ED. MED. AND SURG. REPORTER:—

In reading Dr. F. A. Spalding's directions for the management of natural labor, in the REPORTER for August 13th, I was led to fear that some, for want of experience, in following implicitly his directions for using oxytocics, "ergot, quinine, alcohol, strong coffee, or biborate of soda," might, in certain cases, cause almost irreparable damage to their patients, especially by the injudicious use of ergot. Only a day or two before reading this article I was called to see a woman, twenty-six years of age, and five years married, who was represented to me as having womb disease, from which she had been an invalid for three years. While waiting for the arrival of her medical attendant, I got from her the following information in regard to the origin of her disability: She was confined three years ago, with her first child, at full time. Had a tedious labor, lasting from a Sabbath morning until the Tuesday following. Her medical attendant had a second physician called in. "The doctors gave her something that caused a constant spasm of strong pain, from which she got no rest until the child was born" dead. A year later she had a miscarriage at the fifth month: and last year an abortion at about two and a half months. She had been a bad invalid from her first confinement. When her physician arrived, I found he had never made an examination of the womb, but had contented himself all this time with palliative treatment. He confirmed her history of the case; and said that the pains were during all the time inefficient, and finally almost ceased; that they then gave her ergot, and accomplished the delivery.

My diagnosis, being a lacerated os uteri, was confirmed by the examination. It could be plainly felt by the finger, and was plainly revealed by the speculum. Here then, we have a

ruptured os uteri, and a dead child, as the result of the injudicious use of ergot. Had they, instead, given chloral hydrate, until the patient had been brought fully under its influence, the os uteri would have been dilated, so as to allow the head to pass without danger of rupturing the os; nature would have rallied, after the rest thus procured, so that an oxytocic would hardly have been called for, and had it been, it could then have been safely used, a living child would have been born, and the mother saved years of invalidism and suffering.

I would also take the same exception to his iron-clad rule to break the membranes.

I have seen cases where the labor was retarded by a large amniotic accumulation, and morbidly tough or strong membranes, and where their rupture aided the delivery; but as a rule, I retain them intact, if I can, until the os uteri is well dilated.

T. M. Harris, M.D.

Ritchie C. H., West Va., Aug. 22d, 1881.

Hints for Using Iodoform.

Ed. Med. and Surg. Reporter:—

It has been a great desideratum with the profession to find a deodorizer for iodoform. I have used in my practice a solution of hydrate of chloral ℥j to ℥j of water, as a wash for the hands when I wish to remove the odor, which it unquestionably does in a few moments. I have also used equal parts of the hydrat. chloral and iodoform, say ℥j each, glycerine ℥ij, ung. petrolii ℥vj, as an ointment to promote granulation in unhealthy ulcers. This combination was highly satisfactory in the object desired; the ulcer healing kindly, and the disagreeable odor entirely destroyed. In cases requiring the powder of iodoform in a dry state, let the absorbent cotton be wet with this solution of chloral and dried, then placed upon the parts that are covered with the iodoform, and the odor will be very effectively controlled, infinitely better than the combination of bals. Peruvian, mint, or anything else I have tried. In not a few instances the chloral will prove a factor in the treatment.

Danville, Va. B. M. Walker, M.D.

On Placenta Prævia.

Ed. Med. and Surg. Reporter:—

I notice in the Medical and Surgical Reporter, of the 13th ult., a case of placenta prævia, reported by J. N. Davis, M.D., of Farmland, Ind., in which both mother and child were lost. This induces me to report a case of placenta prævia occurring in my practice, in which both mother and child were saved.

Mrs. P., from the sixth to the ninth month of her gestation, had a number of attacks of hemorrhage, in which she lost from a gill to a pint of blood when near her full time. I was hastily summoned to see her, and found that labor had commenced and the wasting very profuse. On examination I found the os uteri but slightly dilated, and the placenta interposed between my finger and the head of the child. I immediately introduced Braun's Colpuyrenter into the vagina and distended it with warm water till it completely filled the passage. This at once checked the hemorrhage. I let the colpuyrenter remain for four hours, during which time it prevented the wasting so perfectly, that not a drop of blood passed. I then gave her a full dose of fluid extract of ergot, removed the colpuyrenter, and finding the os uteri dilated, I immediately introduced my hand and turned and delivered the child with all possible haste, the afterbirth coming away in advance of the *child*; by using brisk friction and compression over the region of the womb, contraction took place rapidly, the wasting ceased, and the woman, though very weak and bloodless, had a good but slow getting up. By using artificial respiration the child was soon made to breathe, and soon cried lustily. I have used the colpuyrenter in other cases, with equally as good success as with the above case, and have found it in every instance to pull open the os uteri in four hours. I have found the colpuyrenter vastly superior to the old fashioned tampon, or Barnes' dilators, not only in placenta prævia, but also in abortion cases, and in bringing on premature labor in cases of contracted pelvis.

Parkersburg, W. Va. Isaac Scott, M.D.

Confessional Department.—The Danger of Exhaustion in Obstetric Operations.

Ed. Med. and Surg. Reporter:—

The recital of the following cases may prove of service in suggesting the importance of watching the condition of the woman in obstetric operations:—

A patient was found to have retarded labor, and in due time the forceps were applied. After a long and a strong pull the child was delivered, but the consternation of the physician can readily be understood when he found that the mother was dead.

Another case, fortunately not so grave, was of the same class. A multipara, after a tedious delay, had the forceps applied. The two attending physicians, after exhausting themselves in the futile attempt to deliver, fortunately thought of carrying the hand into the uterus to make out the cause of obstruction. To their surprise the occiput was posteriorly placed. With but little difficulty it was restored, and in a few minutes a still-born child was delivered, and in turning their attention to the mother she was found nearly moribund. She recovered.

A third case was without blame to the physician, but, introduced to accent the importance of closely watching the patient. A woman in labor with breech presentation came under the charge of her physician. He recognized that she was in a debilitated state, and called to his assistance a medical friend. The obstruction (not defined) was so great that one of the feet of the child came away. The exhaustion of the patient was so great that all efforts were abandoned, and in a short time she died. These cases have been sent to the confessional department of the Reporter, with the hope that they may be of service in calling the attention of physicians to the importance of having a close observation on the state of the mother, for in the embarrassment of failure in delivery the mother is liable to be overlooked, with results which have been indicated above.

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News and Miscellany.

President Garfield's Death.

The months of anxiety have terminated at last with the death of the patient for whom a nation mourns and in whose loss the whole civilized world sympathizes. The particulars of the last hours are familiar to our readers, from the daily papers. Profound blood poisoning led to a hypostatic abscess in the lungs, which very rapidly reduced the strength and impoverished the blood. The immediate cause of death was probably the formation of a clot in the heart.

The medical history of the case has been kept with the greatest care, and is already in great part in print. Any criticisms, such as from time to time have appeared on its management, will be out of place until the history is published, when, no doubt, every step in the treatment will be closely scanned. Of one thing we feel assured: that is, that since Drs. Agnew and Hamilton have been in attendance, nothing has been omitted that the wisest surgery dictates; whether the same can be said of the immediate treatment of the wound after it was received, is another and a very different question.

A New Rival of Chloroform and Ether.

According to Dr. W. B. Conway, of Blacksburg, Va., in the *Virginia Medical Monthly*, for August, 1881, the *perfume* from a skunk or polecat possesses anæsthetic properties. This discovery was made during the summer of 1879, by a couple of students of the Virginia Agricultural and Mechanical College, who had secured a two-ounce bottle of this well-known scent, and concluding to play a trick upon one of their schoolmates, they entered his room, held him, and administered it (in its most concentrated form), by inhalation. The doctor could not ascertain what amount was administered. However, when he reached him he found the following symptoms: A total unconsciousness, relaxation of muscular system, extremities cool, pupils natural, breathing normal, pulse 65°, temperature 94°; in which condition he remained for one hour. During that time small quantities of whisky was administered at short intervals, *per orem*, with some difficulty of getting him to swallow. Friction was used about the extremities, also hot pediluvia. He was finally aroused, suffering no inconvenience from its effects, except a slight headache, which passed off after a good night's sleep.

We publish the above with the hope of inducing ambitious young students to make further experiments (on themselves) and report the results.

Singular Attempt at Suicide.

The *Siècle Médical* reports a very curious case: an individual, after considerable altercation with his wife, like Betsy Trotwood's husband, on a question of supplies, determined to rid himself of his troubles and his life.

He placed the point of a poignard vertically on the top of his head, and with a hammer drove it in up to the hilt. A physician was called, who found the patient perfectly intelligent; he made the most forcible attempts to withdraw the poignard by pulling on the hilt, but without success. He called in M. Dubrisay, and both renewed the attempt with the same result; the poignard was so firmly fixed that it could not be moved.

The party finally adjourned to a neighboring machine shop, and the handle was fixed in a sort of a vise worked by steam, so that a uniform traction was brought about, and the instrument finally withdrawn with the point somewhat bent. The patient immediately stood up and began to talk; he presented subsequently no paralytic or inflammatory symptoms.

Concealing the Existence of Yellow Fever.

The National Board of Health complains that much annoyance is experienced by them from the persistence with which the local authorities attempt to conceal the existence of yellow fever in parts where it is known to exist, the latest instance being at Key West, Fla., where George Ambrose, a waiter in a bar-room, died of yellow fever. The attending physicians and local authorities refused to admit, however, even after an autopsy by the Surgeon of the United States Marine Hospital Service had clearly disclosed that it was a case of yellow fever. On Sunday, Dr. Green, of the Marine Hospital Service, who was present at the autopsy of Ambrose, died of yellow fever, after an illness of two days. The Health Officer of the port of Key West, under the circumstances, declined to grant clean bills of health to outgoing vessels, whereupon he was removed by the authorities and another doctor appointed to his place, since which time clean bills of lading have been granted to vessels leaving the port.

Poisonous Perfumes.

Various cases of poisoning from the use of perfumes have been reported in recent English journals. In one instance a little girl had bought some heliotrope perfume at a bazaar, and had applied it on her face. This caused a vesicular eruption, swelling, itching, and in fact, erysipelas, which lasted for some time. The scent was made with some of the products of coal tar, and not with the odoriferous principles of plants, thus acquiring its irritating properties.

The Medico-Chirurgical College.

The Session of the Medico-Chirurgical College of this city was opened on Monday, Sept. 12th, the introductory lecture, relative to the Rise and Progress of Medicine, being delivered by Professor George E. Stubbs. A moderate number of students and medical men were present.

Personal.

—Dr. De Forest Willard has removed to 1818 Chestnut street.

—Dr. Charles S. Turnbull has been elected by the Board of Managers of the German Hospital, to the position of Oculist and Aurist to that Institution.

Items.

—Takes the pus cavity: It is easier for the doctors to get a bulletin than to get a bullet out. —*Texas Siftings.*

—A Board of Surgeons for the examination of candidates for appointment in the United States Marine Hospital service has been appointed, to meet in Washington on October 10th. Surgeons Long, Purviance, and Sawtelle have been detailed as members of the board.

—The St. Louis *Globe-Democrat* thus has its say about Maine: In Maine they have a law that no medical student shall be allowed to graduate and practice medicine who has not had regular practice in the dissecting room. Then they passed a law that no bodies, save only the bodies of executed criminals, should be cut up in disecting rooms. Then, as a climax to all this, they abolished capital punishment. That's the kind of a country Maine is. This is like the County Commissioners who passed the following resolutions:

1. *Resolved*, That we build a new jail.
2. That we build the new jail out of the materials in the old jail.
3. *Resolved*, That we use the old jail until the new jail is finished.

—That vivacious writer, Olive Logan, tells of this sad case in one of her recent letters:—

"I know a gentleman, whose occupations compel him to lead a sedentary life, who, in theory is a total abstainer, who has a moral aversion to drink, and yet half a bottle of champagne at dinner is the only agent which stands between him and gastritis, that agonizing neuralgic dyspepsia which kills its hundreds of victims every year. The wine, with him, acts like a charm, and I think—do not you?—that he would indeed be unwise to abandon its use, merely for a moral scruple."

"The skill with which Olive handles the medical vocabulary is only surpassed by her noble liberality of sentiment. Don't we? Give us a chance! We know fellows whose moral aversion to champagne won't stop at half a bottle.

OBITUARY NOTICE.

ARCHIBALD BILLING, M.D.,

Died in London, September 5th. From 1817 to 1836 he was professor in the London Medical School, and while in that position he instituted clinical lectures. When the new University of London was created, in 1836, he was invited to become a Fellow. Dr. Billing was a Fellow of the Royal Society, one of the original members of the Microscopical Society, a Fellow of the Geological Society, and corresponding member of the Medical Societies of Dresden, Florence, Brussels and New York.

He was an extensive contributor to the London *Lancet* and *Medical Gazette*, on various subjects of diseases and physiology. He wrote a treatise on his original discovery of the "Causes of the Sounds of the Heart." His well-known textbook, "First Principles of Medicine," has gone through several editions in England, has been translated in France and Germany, and republished in this country. Another of his important works is entitled "Practical Observations on Diseases of the Lungs and Heart."

PROF. OTTO SPIEGELBERG,

Professor of Midwifery in the University of Breslau, died on August 10th, in the fifty-second year of his age, of disease of the kidneys. Dr. Spiegelberg graduated at Göttingen in 1853, and in 1858 published his first work, a *Compendium of Midwifery*. In 1861 he was appointed Professor of Obstetrics and Gynæcology in the University of Frieburg. In 1864 he accepted a similar professorship at Königsberg; and in 1865 accepted the professorship at Breslau. In conjunction with Dr. Credé, of Leipsic, he established the *Archiv für Gynäcologie*, of which seventeen volumes have appeared. About five years ago he published a large *Text-book of Midwifery*, the second edition of which he had almost completed at the time of his death. The first ovariotomy in Breslau was performed by him, and he operated, in all, in considerably more than one hundred cases.

QUERIES AND REPLIES.

Dr. J. G. C., of Pa.—If you will address the "Dean of the Medical Department of the University of Louisiana, New Orleans, La.," you can obtain circular with full information. It is as active a college as there is in the South.

Dr. J. A., of Vt.—We cannot pretend to decide on the relative merits of the leading surgical works now in print. The one author is superior in one respect, the other in another. Personally we prefer the works of Erichsen and Agnew, but you might not. On Medical Electricity the large work of Drs. Beard & Rockwell continues to be the most complete, although it might profitably (to the reader), have been materially cut down.

Registration, Pa.—1st. Your practice is in two counties; you need register only in one. 2d. A retired or semi-retired physician, who practices only in the families of old friends, and does not send bills, we should suppose, could not be prosecuted for non-registration.

Dr. S. R. J, of Ind.—You will find in the St. Louis *Courier of Medicine*, November, 1880, a case where a man became suddenly and permanently blind after several large doses of quinine—four drachms in twelve hours. We shall be glad to have you give the details of such or similar cases.

MARRIAGES.

WILLARD—PORTER.—On September 13th, 1881, at the residence of the bride's father, 2025 Walnut street, Philadelphia, De Forest Willard, M.D., and Elizabeth M., daughter of Hon. Wm. A. Porter.

DEATHS.

MORRISON.—Of typho-malarial fever, on September 3d, Anna Gertrude, eldest daughter of Dr. Geo. W. and O. R. Morrison, of Chautauqua Co., Kansas, aged eight years, two months and four days.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

CIRRHOSIS OF THE LIVER, WITH HYPERTROPHY.

Clinical Lecture delivered at La Charité,

BY M. HARDY,

Professor of Clinical Medicine in the Paris Faculty.

Translated for the Medical and Surgical Reporter.

Gentlemen:—Cirrhosis of the liver with hypertrophy has been recognized as a distinct morbid entity only within the past few years. Up to this period it has been confounded with chronic hepatitis and with ordinary cirrhosis. An attentive consideration of the observations of authors who, twenty years since, devoted especial attention to diseases of the liver, will demonstrate that many of the cases, both by the symptoms observed during life, as also by the lesions revealed at the autopsy, appertained manifestly to the category of cases of cirrhosis with hypertrophy.

I desire particularly to recall three cases mentioned in the clinical lectures of Andral, where the patients presented, in conjunction with gastric troubles, a remarkable augmentation in volume of the liver, with jaundice, and at the autopsy all the lesions characteristic of hypertrophic cirrhosis. Nevertheless, at this period it was already remarked that in certain patients who presented all the ordinary symptoms of cirrhosis, the liver, instead of being atrophied, was augmented in volume. To explain this it was said that in the first period of cirrhosis the liver was hypertrophied, but became gradually contracted or atrophied at a more advanced period of the disease.

In 1852, M. Gubler, in his aggregation thesis on jaundice, signalized, and he was among the first to draw attention to the subject, a peculiar form of cirrhosis, in which the liver, instead of being contracted, was either augmented in volume or of the normal size. He concluded that this constituted a special variety of the affection.

This supposition had before this been considered by Requin, who, having observed two cases of cirrhosis with an enlarged liver, believed that this effect was proper to an unknown form of the disease. But we must arrive at a much more recent date, viz: 1871, before finding more complete information on the subject. At this period, in effect, after the relation of a similar observation by M. Paul Ollivier, a disease of the liver was described which differed from ordinary cirrhosis by the symptoms and anatomical lesions, and for the first time it was concluded that cirrhosis with hypertrophy was a different affection, constituting a special disease; that it was, in fact, a distinct morbid entity.

From this moment many new cases were reported. M. Hayem observed three cases of cirrhosis, characterized by augmentation in the volume of the liver and jaundice, and at the autopsy by special lesions. Then came the works of M. Charcot and M. Luys on the pathological anatomy of this affection, and finally M. Cornil's work; and it is to him is due the merit of having established that the lesions special to hypertrophic cirrhosis consist particularly in the augmentation in volume of the biliary canaliculi, resulting from the proliferation of the epithelial cells which line the internal walls of these tubes; this condition of things induces consecutively retention of bile in them. From this period a special form of hepatic alteration was admitted, to which the designation hypertrophic cirrhosis was applied.

All these details regarding the history of the malady, the pathological anatomy and the symptoms, are very well described in an excellent work by M. Hanot, who, in 1876, published a very remarkable thesis on hypertrophic cirrhosis, in which he collected a great number of observations from different authors, adding several which he had himself observed.

As regards the history of the disease, three periods may be established: at first hypertrophic cirrhosis is absolutely confounded with ordinary cirrhosis; in the second period it is remarked that the liver, instead of becoming contracted, as usual, may be enlarged, but there is no attempt made to establish a distinction between the two forms; finally it is admitted that hypertrophic cirrhosis is an entirely different disease, having its peculiar symptoms and special lesions. It might be said, even, that we are to-day at the beginning of a fourth period.

And in effect, although through the labors of MM. Ollivier, Hayem and Cornil, it has been possible to separate atrophic cirrhosis from hypertrophic cirrhosis, it has yet been found that in a certain number of cases symptoms proper to both are found in the same individual, and that finally the alterations common to both affections supervene. Whence it has been concluded that, though in certain cases atrophic cirrhosis or hypertrophic cirrhosis may be observed with perfectly distinct characteristics, symptoms, etc., yet in many cases these two varieties of cirrhosis are associated, so that there is a mixed form, characterized by the anatomical lesions and symptoms belonging to both forms. Such cases are even frequent. We had such a case in our wards last year; the patient had jaundice and ascites; at the autopsy the lesions of atrophic cirrhosis were found coexistent with those characteristic of the hypertrophic form of disease. Finally, as recently as last week, you have remarked the patient who occupied the No. 5 bed in the St. Charles ward, who presented also, as prominent symptoms, jaundice and ascites, while at the post-mortem the lesions proper to both affections were found.

If, then, pathologically speaking, these are two distinct and separate diseases, clinically such is not always the case; they are often combined and associated together, making a mixed form. In such cases the liver has its normal volume or may become somewhat enlarged; it never becomes so contracted as in simple atrophy. In these cases, through the influence of the hypertrophic cirrhosis, there is a tendency to enlargement, but the coexistent atrophy tending at the same time towards contraction, the organ remains almost of the normal size, and at the autopsy is found to be neither enlarged nor contracted.

The symptoms proper to the hypertrophic form of cirrhosis at the début of the disease differ from those observed later on. In the beginning the patient may suffer from gastro-intestinal troubles. There is notable diminution of the appetite, digestion is difficult, frequently vomiting is complained of, sometimes diarrhœa supervenes. Such were the primary symptoms observed in one of our recent cases. During the eight months he passed in the service you have been able to observe the frequent emesis and the diarrhœa from which he suffered. At this primary period, also, there is very frequently pain, not only in the part of the abdomen corresponding to the liver, but also in the left hypochondrium and epigastric region. These gastric derangements soon enfeeble the patient, causing him to lose flesh and strength. Later on and among the first phenomena of the second stage of the affection, jaundice supervenes, and this, with the enlargement of the liver, is the most marked sign of hypertrophic cirrhosis. It may even be said that jaundice holds the same relation to this form as ascites does to the atrophic form of the disease. Not only the jaundice is intense, it is also persistent. So that certain patients, who have lived five or six years, never were completely clear of this yellowish coloration of the skin, which, though more marked at certain periods, and sometimes completely disappearing for a time, almost always remained persistent, and in some cases was permanent.

In connection with this well marked sign, there is another which, with the pain in the right hypochondrium, of which I have spoken, early attracts the patient's attention. This is an enlargement at the upper part of the abdomen, which prevents the patient from buttoning his garments as usual. And, in effect, there exists there a veritable tumor, and when the abdomen is examined by palpation, a notable resistance is found in the right hypochondrium, which indicates that the liver is augmented in volume.

In order to well appreciate this enlargement of the liver by percussion, it is well to commence above and proceed downward, beginning directly beneath the axilla, so as to determine the extent of transversal dullness.

Not only the liver is augmented in volume; it is found also that the spleen has undergone considerable enlargement, much more marked than in the atrophic form of the disease; at the same time there is considerable pain on pressure over the organ. In certain cases this splenic enlargemen

is so marked that it is impossible to determine, by percussion, where the dullness due to the spleen ends and that to the liver commences, in the epigastric region. But in the course of the disease the patient frequently suffers from intense pain over these organs, and also frequently over other portions of the abdomen. These painful symptoms are explained by the pathological anatomy which demonstrates the existence of localized inflammation, either of the peritoneum covering the liver or spleen, or even of that portion of the serous membrane which is spread like a veil before the intestines. It was this chronic inflammation of the peritoneum which induced the vague pains in the side of the abdomen complained of by the patient of whom I have recently spoken.

At the same time certain negative symptoms are observed, which aid in establishing the diagnosis between the two forms of cirrhosis. Thus, if the superficial abdominal veins are not prominent at the surface of the skin, and are not distended, it may, thence, be concluded that the circulation in the liver is free, that the hepatic veins are not compressed, that the portal system is intact and performs its functions, that consequently there is no necessity for the blood to pass by the collateral veins to reach the heart; in a word, it may be assumed that the case is one of hypertrophic cirrhosis.

But it must be said, also, that this dilatation of the subcutaneous abdominal veins is frequently observed in hypertrophic cirrhosis. M. Hanot reports in his thesis several observations of this kind, and our own patient was an example. It would seem, however, that this negative phenomenon, the absence of venous dilatation, which has been considered as one of the characteristics of hypertrophic cirrhosis, has not its *raison d'etre.* When such does exist, it is generally the mixed form of cirrhosis, in which the two forms coexist in the same individual, that is present. It is in effect in these mixed forms that, with a liver of the normal size and with jaundice of more or less intensity, exaggerated development of the pre-abdominal and hemorrhoidal veins, and all the signs of difficulty of the hepatic circulation, finally supervene.

Another negative phenomenon of the highest importance is the absence of ascites. But if ascites does not exist ordinarily in true hypertrophic cirrhosis, M. Hanot has nevertheless cited cases where patients presenting all the characteristic signs of this affection had a considerable effusion of liquid in the peritoneal cavity. Our patient, as also the one observed last year, was in the same category. This sign, then, has not, any more than the dilatation of the abdominal veins, the absolute value ordinarily attributed to it. Yes, certainly, ascites is not present in simple, uncomplicated, hypertrophic cirrhosis; but there are many cases where the symptoms of both forms are found united, and in which are observed at the same time jaundice, ascites and dilatation of the pre-abdominal and hemorrhoidal veins.

I would add that the urine, in this malady, presents all the physical and chemical modifications usually observed in patients with jaundice. Thus, it is voided in greater quantity than in atrophic cirrhosis; it has a dark yellow coloration which has no resemblance to the hortensia red tinge, due to the presence of urates and urohæmatin, of the urine of patients in the atrophic form. On the contrary, in this form of the disease there is often a marked diminution in the quantity of urea; sometimes but four or six grams are excreted in twenty-four hours, instead of twelve or sixteen grams, the usual quantity excreted in the normal state of the system.

Patients in hypertrophic cirrhosis are subject to hemorrhages from the nose, the skin, the mouth, etc.; these symptoms are due to the jaundice and not to the hepatic lesion itself. It will be observed that these individuals, subject to hemorrhages during the period that they have the yellowish tinge communicated by the bile to the integuments, cease to suffer from them when the jaundice itself disappears.

Independently of the local phenomena which I have described, there also exist in this malady various constitutional symptoms. Thus, after a period, though sometimes from the début of the malady, there supervenes a disgust for food, anorexia, vomiting, diarrhœa, and finally, through want of nourishment, loss of flesh and general feebleness. Finally, after a variable period, supervene all the phenomena of cachexia, which demonstrate the effect of the disease on the general health.

On the other hand, the jaundice, when it is intense and persists for a lengthened period, presents all the symptoms observed with this morbid condition, that is, the presence of râles disseminated throughout the entire extent of the lungs, and particularly this tendency to hemorrhage of which I have already spoken, and finally, when the end is nigh, all the phenomena which characterize pernicious jaundice (ictère grave).

Hypertrophic cirrhosis is always a very serious malady. Ordinarily its debut is insidious and obscure; it commences as a gastro-enteritis; the

liver becomes enlarged, jaundice supervenes, and the disease is in the way of progress.

When the malady is simple and without complication, it may have a very long duration, it may be prolonged two, four, six, ten years, even, presenting alternatives of exacerbation and remission. Then a moment arrives when the patients succumb.

In effect, no well authenticated case of recovery from hypertrophic cirrhosis has ever been reported. It is true that at the present moment we have in our service a patient who at the time he entered the service, was very weak and had become very thin; at present he is very much better and seems to be fast regaining strength and health. But is this cure? We have, unhappily, many reasons to doubt it, for, as I have just said, this amelioration is often but momentary; for a few weeks, and sometimes even for several months, the patient seems to enjoy good health, then the disease pursues its course with even greater intensity than before.

The termination of this form of cirrhosis is, then, death, at a more or less advanced period. It supervenes in different ways; sometimes it is brought about by some intercurrent malady, entirely independent of the principal disease; again, it may be brought about by some lesion due to the condition of the liver, such as peritonitis, or as we observed in our patient of last year, by pleuritis, through propagation of the inflammation from that part of the peritoneum covering the diaphragm. But this mode of termination is rare, and most frequently the patients succumb through the effects of a partial peritonitis, causing numerous adhesions between the peritoneum and the intestines.

Patients again often succumb through the jaundice. After a certain time, in many patients, all the phenomena of pernicious jaundice supervene; there is abundant hemorrhage; they fall into a comatose condition; the pulse, although frequent, becomes excessively feeble, and the patients succumb. It has been said that this is the most frequent termination of the malady. It is an error; all that can be said is, that this is one of the modes of termination of hypertrophic cirrhosis.

The prognosis, then, is very grave. But it must be remembered that although no cases of complete recovery are known, still the malady is often of a very long duration; sometimes the patient lives five, eight, or ten years.

But if such be the case for simple uncomplicated hypertrophic cirrhosis, a distinction must be established, as regards duration, for those cases where the atrophic form exists conjointly with it. In these mixed cases, in effect, the prognosis is of much greater gravity and death supervenes much more rapidly.

I will not need to linger long over the consideration of the diagnosis of this disease. I have shown you how it was to be distinguished from the atrophic form of cirrhosis; and how, when the symptoms proper to both were found co-existent in the same individual, it might be affirmed that such a case constituted one of those mixed forms of which I have spoken.

I will add, that you will be able to establish the differential diagnosis between cirrhosis with hypertrophy and cancer of the liver, by the rapid course of this last disease and by the presence on the surface of the organ of inequalities and nodosities, which are absolutely wanting in cirrhosis, and finally, by the very grave phenomena accompanying cancer. You will be able, also, to distinguish the malady from hydatid cysts of the liver. In both cases, it is true, there is enlargement of the organ; but when this hypertrophy is due to the presence of a cyst, it is not extended to all the liver, but is confined to that part of the organ in which the tumor is situated.

Again, in hypertrophic cirrhosis, independently of the enlargement of the liver, there is enlargement, often enormous, of the spleen.

Finally, there is rarely jaundice when hydatid cysts are present, and certain special signs, such as fluctuation and hydatic vibration or thrill, when present, aid in forming a diagnosis.

As regards the etiology of hypertrophic cirrhosis, it is, in great part, yet to be determined. Concerning the various influences under which this malady may be developed, we have but presumptions. Among the best known causes, the abuse of alcoholic stimulants, which holds the first rank for the atrophic form of cirrhosis, has an especial influence in the production of those mixed forms of which I have spoken.

The calculous diathesis has been considered as one of the frequent causes of this disease, and the pathological anatomy demonstrates in what way. Let us suppose, in effect, that there exists an obstacle to the free passage of the bile, either in the hepatic canal, in the ductus choledochus, or at any other point; there will ensue a dilatation of all the passages behind the obstacle, even to the smallest ramifications of the biliary ducts. Then supervene all the consequences which result from this arrest of bile, and which may be induced artificially by ligature of the ductus choledochus in animals. As the bile cannot be poured

into the intestine, the radicles of the hepatic ducts become dilated and the liver enlarged.

In some cases, as with one of our patients, atrophic cirrhosis supervenes after an obstruction of the ductus choledochus, and M. Hanot cites several such cases in his thesis.

Another cause which has been invoked is malarial poisoning. In effect, in persons who have long lived in malarial districts and have suffered from the fevers there generated, there exists an enlargement of the liver and spleen, whence may result serious compression on the organs which serve in transporting bile. This condition of the liver and spleen has an incontestable influence in certain cases, and we have had an example in one of the patients in our service.

As regards the treatment of this affection, there is, unfortunately, little to be said, for it is ordinarily without success. Nevertheless, in certain cases, an amelioration in the state of the patient has been brought about by the iodide of potassium, particularly when, at the same time, revulsive applications are made to the hepatic region.

M. Bucquoy cites a case of well marked cirrhosis, where complete cure was obtained by these means. But in the great proportion of cases the amelioration is but temporary, and the malady soon reappears.

Tonics should be administered, to sustain the patient's strength; the bitter preparations, to stimulate the functions of the stomach; and, finally, alkaline mixtures, to facilitate digestion.

Purgatives should be avoided; these patients are liable to become subject to incoercible diarrhœa, and sometimes a purgative suffices primarily to provoke it.

In this malady, also, calomel, so much lauded in England in the treatment of diseases of the liver, does not appear to be of any utility.

Finally, when the liver is considerably hypertrophied, good results may sometimes be obtained from certain alkaline mineral waters, which have considerable action in enlargement of various organs. I would specially indicate at this point of view the waters of Vals, of Vichy, of Carlsbad, which are indicated when there exists enlargement of the liver or spleen; when, in a word, there is any obstruction in the intestines. In these cases, the waters of which I have spoken have sometimes marvelous effects. I have known individuals returning from India with the spleen enormously enlarged, in the last stage of cachexia, present, after a season at one of these stations, considerable amelioration, and even arrive at complete cure after three or four seasons. Therefore, I do not hesitate to declare that if I had a patient with hypertrophic cirrhosis, whose means permitted him to make a sojourn at Vals or Carlsbad, or at Vichy, I would surely advise him to essay this medication.

It is hardly necessary to say that in such cases diet should receive careful attention, and abundance of nourishing food be given, to oppose as much as possible the incessant progress of the cachexia which continually menaces the lives of patients in hypertrophic cirrhosis.

COMMUNICATIONS.

CLINICAL STUDIES OF INEBRIETY.

BY T. D. CROTHERS, M.D.,
Of Hartford Conn., Superintendent of Walnut Lodge.

Relations of Inebriety to Life Insurance.

(*Continued from page* 342).

A leading officer in an eastern company said that inebriety was the Waterloo upon which we are all wrecking. Every year the death rates from inebriety are increasing beyond all proportion to the vigilance and specific instructions of both officers and agents. The data from which the longevity tables are calculated are unreliable, because they do not represent the natural life of those who have died. The principles deduced from these are equally false, because the company are not insuring healthy lives, and the reported causes of deaths are untrue. The rates based on these false figures are also unjust to both the company and the insured; and there is not a company in the country who is not carrying a large proportion of inebriates among its policy holders. For this the companies are in some measure responsible, and for which they pay dearly, in the increased losses, year after year. Life insurance does not insure, when one-third of its policy-holders are inebriates and its officers are drinking, horse-racing men. Life insurance cannot literally insure, when they admit inebriates of all grades, under the name of moderate and occasional drinkers. As at present managed this condition is inevitable, and every company is insuring inebriates, no matter what their restrictions may be. In proof of this, one company made an examination of ten policies taken in one year, for ten thousand each. The reports of the local examiner showed that the risks were good, but a private history showed that two of these cases were periodic inebriates and three were moderate or occasional drinkers. The agents and local examiners were conscientious, and did the best they could, but had been deceived. This was the condition in one of the

best companies, where total abstainers only were insured. A universal sense of insecurity and alarm pervades the mind of careful companies, and the inquiry, What can we do? comes up from all sides. The answer may be summed up in the following propositions:—

1st. The only remedy is in a study and recognition of inebriety as a disease, governed by certain fixed laws, starting from definite causes that are more or less apparent, and passing, from stage to stage, into full development and decline. 2d. Such study will indicate the conditions which encourage or retard the growth of inebriety, and all the circumstances which favor its development, with the influences of heredity, and other facts governing the longevity and risk of life in the patient. 3d. When the local examiners are competent to make such a study of the case, and will realize that every evidence of moderate drinking is a symptom of a grave disease, that may go on to maturity, or in some instances remain stationary a lifetime, but at all times threatens a fatal outbreak; then the companies may be able to fairly insure in justice to all. 4th. Until such a study is made, every company is doing a perilous business, whose success depends more on coincidence than on skill and management. This question is not only a pecuniary one for the company, but one of social science, involving vast interests in both the individual and community.

When inebriety is recognized as a disease, and treated accordingly, many of the evils which follow from it will be lessened and prevented. The too frequent incident of men of property and culture occupying responsible positions in life, going down rapidly as inebriates, not only destroying themselves and family, but leaving an entailment of misery behind them, without a practical effort to save them, other than appeals to their diseased will to recover, is a disgrace to the intelligence of the age. The business ignorance of life insurance companies that will insure moderate drinkers, and the stupidity that will depend on the opinions of non-experts on questions requiring the best trained talent, deserves to fail, for they are inviting the very conditions which make failure certain. In support of these facts I am able to present the histories of some cases which have come under my observation and that of the officers of some of the companies.

Inebriety from Inheritance; Concealed for Years. Heavily Insured. Death, etc.

Case 1.—B. was a business man, whose father was a moderate drinker and mother died of consumption soon after his birth. He was a free liver up to thirty, when he began to have paroxysms of drinking; they began after some business failures, and recurred every four or five months, with distinct free intervals. These increased until they came on every three or four weeks. He was insured at this time for fifty thousand dollars, in three different companies; he claimed in his policies to be only a moderate drinker. When the paroxysm came on he would go away to the country, and remain in some quiet place for a week, intoxicated nearly all the time, then recover and come home, and remain perfectly sober for a long time.

The most unusual symptom of his case was his intense desire to conceal his real condition, even from his family, which he succeeded in doing for a long time. He seemed to have no idea of deceiving the insurance company, but like all others of this class, was full of delusions that he could stop himself, and had no disease of any kind. The agent was an intimate friend, and did not suspect his condition until death, which followed a protracted paroxysm of drink. The local examiner was a moderate drinker, and laughed at the idea of disease. The companies paid the amount.

Inebriety from Exhaustion; Concealed; Insured; Death.

Case 2.—C. was a speculator and politician, who had been sun-struck at twenty-five, and used spirits from this time more or less, to intoxication. He was an irregular drinker; sometimes he would be sober for months, then he would go away to some distant city, and drink hard at night, for many days. He was prominent in all efforts to help on the temperance cause, and claimed to be suffering from overwork. In this condition he secured an insurance of eighty thousand dollars on his life, without any hesitation by either agent or examiner. He claimed to use spirits at times, but only occasionally. He made no effort to conceal his condition, only it was noticed that he went to more distant cities when drinking. Two years after he died, and the certificate was signed as death from pneumonia. He had returned from one of his severe paroxysms, worn out, and died of general exhaustion. The agent and physician were both deceived, and never suspected excess in drinking. The insurance was paid, and two years later, when his property came up for settlement, these facts appeared.

Inebriety, Periodical; Concealed; Insured; Death; Contest; Defeat.

Case 3.—D. was a clergyman who inherited a nervous diathesis, and began to drink in college,

from some obscure cause, and later, when he became a periodic inebriate, retired from active service, and drank only at night, in his room. He would not meet any one while in this condition, and claimed that he was sick, and used spirits to relieve pain. He was insured for thirty thousand dollars, in the best companies, and the risk was thought to be a good one. No one supposed that he was an inebriate; finally he was found dead, from what the physicians called apoplexy. One of the companies refused to pay, and set up the defence of inebriety, which they failed to prove, because the local physicians doubted if he could drink in secret for years, without making a public display of it. They also considered it impossible for any one to drink to excess, so as to injure his health, without a combination of symptoms which would have been apparent to all. The company was obliged to pay at last, and the agent and examiner were convinced that he did not have inebreity.

Inebriety from Shock; Insured; Not Considered Dangerous by Examiners.

CASE 4.—E., a country merchant, who was severely injured by a fall, was profoundly agitated at the prospect of death, and began to drink alcohol to excess. From this time he used whisky on all occasions when he felt exhausted, being intoxicated once or twice a week, at home. He applied for insurance and was accepted as a moderate drinker. An officer of one of the companies, staying all night at the hotel, found him much intoxicated, and went to the agent, who said he was not an inebriate, having been so for many years. The local examiner was of the same opinion, and asserted that this was not in any way uncommon; that he had seen many persons drinking for years, who were not, in his opinion, injured by it. The policy was canceled and the officer found, in this State, over two hundred thousand dollars of insurance on inebriates in like condition.

CASE 5 was a periodical inebriate, with sixty thousand dollars insured on his life, who had two distinct attacks of delirium tremens. The agent and local examiner both regarded this case as of no particular danger, based on the statements of the patient that he could and would stop at any time. They acknowledged that the delirium tremens was possibly dangerous, but short of this nothing was alarming, and the chance of a long life quite good. The physician wrote me that he doubted the injurious effects of alcohol where the article was good, and it was taken after eating. He also believed that the use of alcohol in the parent made it possible for the son to drink with greater safety.

CASE 6.—An inebriate with a marked history of insanity was heavily insured in a New York company. The medical examiner and president of the company differed as to the danger of the risk, and referred the case to me. The man was a constant inebriate, who never seemed intoxicated, but was constantly under the influence of spirits; he seemed capable of transacting business and talked sensibly. The medical examiner called this an average case of vice or habit, in which the person was not generally the worse for the excess, and that as long as he remained in his present condition the risk to the company was no greater than in any other case of over work or over eating. The president insisted that the case was dangerous, and that the natural period of life was constantly lessened by this excess, and that the company should not insure such a life. The policy was canceled, and patient died in an insane asylum within a few months.

CASE 7.—A man heavily insured was taken violently insane and died of some obscure brain trouble. The company found that he had been an impulsive inebriate for years before he was insured, and that the local examiner considered him a mere pleasure seeking man, with the habit of drink; not diseased, but simply giving way to his passions from time to time.

CASE 8.—A broken down lawyer, became heavily insured and died soon after. The facts were as follows: He was an inebriate from inheritance, but drank away from home and concealed his real condition from his friends. The local examiner was fully aware of his excesses, but as long as he returned in apparent health did not consider it of any moment. He evidently realized that he could not live long, and took this means of securing a competency for his family. The company contested the case on this ground, but was defeated.

CASE 9.—A man with fifty thousand insurance on his life broke his leg and died of gangrene a week later. It came out on the examination that he had been an inebriate for years, and both the agent and local examiner had known of this fact, but he was down on the policy as a moderate drinker, had been accepted by the company, and examined for an additional insurance. The local examiner gave the same reason of vice, and doubt as to the bad effects of spirits if taken as they should be, as given by other instances.

CASE 10.—Was the son of a very rich man, who had been for years a chronic inebriate. He came under my care, and soon after an agent of a life insurance company wished me to give a statement of the case, with a general prognosis.

This I did, stating the facts which were apparent to the most general observation. Six weeks later the agent and a local examiner passed him for a ten thousand dollar policy. One month later twenty thousand more was put on his life. The local examiner remarked, in answer to my surprise that any company would take such a risk, that his father could pay the premium, and that all such cases were no greater risk than others, particularly when they were certain of the premium. It subsequently appeared that the father was anxious to get back some of the money he was expending on him; knowing that he could not be helped permanently, or would not live long, he sought this means to make his death profitable. He was very retired for two years, until death, and the company paid the insurance.

Case 11.—Was a similar chronic one, in which the father-in-law procured a heavy insurance, and kept it up for years, on the patient. He was a few weeks under my care, and then taken to the country, his friends manifesting great care to keep him from public notice.

Case 12.—An officer of a reputable company, who was insured for a large amount of money, used alcohol to excess every week. The rules of the company forbid any insurance of moderate drinkers, and yet this officer claimed that he merely used it for medicine. This case came under my care for advice. I gave a decided opinion, which was put away as ultra and fanatical. The officer resigned and died soon after; his insurance was paid, but another officer of the company said his example and diseased opinions cost the company over three hundred thousand dollars.

Case 13.—Was an inebriate physician, who for many years was a local examiner for two companies, who only insured abstainers. In twenty-one cases passed by him, nine were inebriates, and six of these nine died within two years and the company paid the policies. He died at last, with forty thousand insurance, and the company settled. He was an honest, conscientious man, who believed that all these cases were fair risks for the company.

Case 14.—A noted statesman, who was a periodic inebriate, was insured in different companies for eighty thousand dollars. Every local examiner accepted his statement that he could stop any time, and only drank when suffering from malaria, and for five years, until death, his premiums were accepted.

Case 15.—Was alternately insane, and an inebriate, who was insured by his friends at the company's office, and on the statements of friends who were thought to be reputable; no inquiry was made into his past history, from outside parties. His son, an inebriate under my care, was also insured; both died, and the company paid the policies.

Case 17.—Is now insured for a large sum, and is using alcohol constantly, to intoxication. The company's agent called and advised him to stop the use of alcohol, and that is all that has been done. As long as he pays the premiums promptly no questions are asked, but when he fails to do this, they will probably discover that he is an inebriate, and cancel his policy.

Case 18.—Is a chronic repeater, who goes from one asylum to another, and drinks in the intervals. The officers of all the companies know of this state, but as long as he is prompt in his payments they do not discover his condition. He was insured in this condition at the home office, and urged to give up the use of alcohol. This he faithfully promised, but goes on from bad to worse, in the full conviction that at death his family will get forty thousand dollars.

These and other cases which might be cited point conclusively to the utter fallacy of forming any conclusions from the vital statistics of life insurance companies as at present managed. No rigid instructions to agents can avail when these men are incompetent to make the most general examination. Local examiners engaged in general practice cannot, for the mere pittance they receive, prepare themselves and make the necessary careful study of the case. The company cannot expect any better state of things as long as they trust to incompetent agents questions which only skilled men can determine. Every local examiner and agent is called to determine conditions and probabilities that are more vital and important than questions of insanity. No answers to a stated class of questions can apply, or bring out the facts most essential in a large majority of cases. The presence of inebriety is often a most difficult question to determine, but when present its influence on longevity cannot be mistaken, and its fatality exceeds that of all other diseases. Owing to the confusion of opinion, the early stages are overlooked, and it is only recognized when chronic stages come on, and even then a belief prevails that the victim is suffering from a voluntary disorder more or less under his control. Life insurance companies should take up this study as a measure of self protection, if for nothing else.

—The Atlanta *Medical and Surgical Journal* has become the Atlanta *Medical Register*.

A SUGGESTION IN THE MECHANICAL TREATMENT OF ACUTE INFLAMMATORY CONDITIONS OF THE ANKLE JOINT.

BY CHARLES F. STILLMAN, M.D.,

Of New York,

Delegate from American Medical Association to Foreign Societies, for 1881-82.

In the treatment of sprains and other injuries about the ankle joint, it has long been a desideratum to possess a splint which would allow a local extension of the part, and also motion when required; as the prolonged continuance of the foot in one position is apt to produce adhesions between the tendons and their sheaths, and often graver disorders, and thus prolong treatment.

The splint figured in engraving No. 1, devised by me for this purpose, is so constructed as to admit a local extension, and also motion. It also allows fixation of the joint at any angle, with or without extension, and permits exposure of the surface about the joint for inspection and applications. It is made of steel, and fastened to a leather or felt sole below, and two zinc or copper plates above, as in Fig. 1, or to a low laced shoe below and padded girth above, according to the acuteness of the symptoms.

Fig. 1.

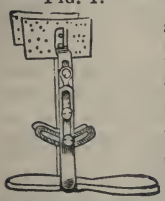

Fig. 2.

If the former be used, it is fastened firmly to the foot and leg by starch bandage, or plaster-of-Paris, as in Fig. 2. The local extension is produced by separating the attachments, as far as practicable or necessary to relieve pain, then clamping the uppermost clamp on the upper strip (which is the extension strip). This distance between the attachments is then retained at all angles the foot assumes with the leg, as in Fig. 3, and the weight of the body and the pressure from the constant muscular contraction are both removed from the joint and its neighborhood, and transferred to the splint, which acts as a false joint, to do the work of the true one while it is laid up for repairs.

Fig. 3.

Fixation is produced at any angle by simply clamping the three clamps.

In a case of sprain or any injury in or about the ankle joint, the surgeon, by the use of this splint, can remove all weight of the body from the joint, and yet have it completely under his control, producing either fixation or motion, as he may wish, and still leave the joint exposed for elastic compression and applications.

This brace, in its modified form, is also of the greatest use to patients who are recovering the use of the foot after treatment of an acute sprain or other injury, as it assists the ankle by transferring the weight of the body from the ankle joint to the splint, and prevents it from turning under.

104 *West 34th St., N. Y.*

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

SERVICE OF JOHN ASHHURST, JR., M.D., Professor of Clinical Surgery.

Reported by GUY HINSDALE, M.D.

Railroad Injury.

CASE 1.—This patient was admitted the night before last. While riding on the platform of a freight car, his feet being braced against another car behind, the train suddenly came to a standstill, and as the cars jolted together, he received his injury. After an accident of this kind we often find a fracture of the femur; the bone is apt to give way at about its middle. The force in this case having been equally applied to both feet, the injury was less severe than might have happened under other circumstances. We may thus have from the same blow very different results, varying according to the position of the subject at the time of the accident. There is possibly a fracture of the fibula on the right side; there is a great deal of localized tenderness at the upper fifth of the bone, and there is great swelling and tenderness of the muscles. You observe also the swelling of the knee joint. The way in which we decide whether there is effusion in the knee joint is by tapping the patella; if there is effusion into the joint the bone can be pushed down and will rebound, it will float, as it were. But here it does not float, and the effusion is probably in the bursa, outside of the joint. In the treatment of a case of this kind we should simply make a double inclined plane by placing a pillow under the knee. The patient is to be kept at perfect rest and applications of lead water and laudanum made to the joint. By passing a bandage under the pillow and tying it up on either side we make a sort of splint, and give the proper support. One of the most interesting features of the case is the illustration of the different effects produced by a diffused force and by a concentrated blow.

Warty Ulcer.

CASE 2.—This patient declines treatment. He presents a rare form of disease, and I bring him before you in order that you may be familiar with it. He has a history of an injury received from a cart-wheel a good many years ago. The wound did not heal soundly, but underwent a process of ulceration

and re-ulceration, and during the last few months has extended deeply into the tissues of the heel. It has now the characteristic appearance of the so-called "warty ulcer," and involves the bone. This is an illustration of the change from a simple inflammatory condition to disease of a malignant type. The epithelial formation, instead of being limited to the surface, proceeds inward. We see a similar change in epithelioma of the lip, beginning usually as an indurated fissure, and caused by some local irritation, in many instances, apparently, by the use of a short pipe.

We are, therefore, dealing with what is called the "warty ulcer of Marjolin." The late Mr. Collis, of Dublin, reported some cases of this affection benefited, if not cured, in their early stages, by the application of bismuth or of ice. But where the disease is complicated by a carious condition of the bone, reaching such an advanced stage as in the present instance, such applications are futile. The disease, however, continues, for a long time at least, to be a local affection, and the general health may remain unimpaired for many years.

The course which I recommend to this man is amputation of the foot. The sore may partially heal again, as it has on previous occasions; but he will never have a useful limb. As he turns the foot toward you, notice the great depth of the ulceration, and also the peculiar offensiveness of the discharge. Along the margin of the sore there are large, warty granulations, of the size of a Lima bean. These are characteristic; you can distinguish them from ordinary granulations by their large, warty appearance.

Caries of the Calcaneum.

Case 3.—This little fellow has also disease of the heel; there is caries or ulceration of the bone, and it requires an operation, but not amputation, as I advised in the last case. We will remove merely the diseased parts. There are two sinuses, one on either side of the tendo-achillis, and the bone is extensively involved. I shall do here an operation which Sédillot, the eminent surgeon of Strasbourg, has described under the name of *évidement*, and which consists in very free gouging, leaving, however, a shell of bone next to the periosteum. Prof. Ollier, of Lyons, removes the whole bone in cases of this nature, by the operation of *subperiosteal excision*, the periosteum being carefully preserved, in order that, by its osteo-genetic power, the excised portion may be reproduced. Another advantage of sub-periosteal over simple excision is that by preserving the membrane in question the attachments of the various muscles are not disturbed. Even when there is no reproduction, however, the result in cases of this kind is often very satisfactory, the wound filling with granulations, which are subsequently transformed into a dense, fibrous, cicatricial mass.

Both Sédillot's and Ollier's methods are of value in suitable cases, and either is preferable to amputation.

Note.—The limb having been rendered bloodless by the use of Esmarch's apparatus, a curved incision, with its convexity downward, was then made upon the side of the os calcis; the dead bone was removed by the gouge and other instruments, and a deep cavity in the bone was left. This cavity was stuffed with oiled lint before removing the Esmarch's tube, and there was very little oozing of blood. A roller bandage was then applied, to support the wound.

Syphilis.

Case 4.—This patient is affected with a venereal disease, with somewhat equivocal symptoms. He has a sore on the penis, which commenced three months ago; there is now a certain amount of induration about it, but it is not characteristic, and might be the result of cauterization. Some of the glands in the groin have suppurated, which is not a common occurrence in the syphilitic bubo. There is, however, present, as you observe, a well-marked secondary syphilitic eruption. It is in its early stage, and is papular. The primary sore showed itself three months ago, and the ulceration of the groin four weeks ago. The chancroidal bubo is usually found on one side only, and commonly on that of the sore from which it arises, though it is occasionally found on the opposite side, as the result of the crossing of the lymphatics on the upper surface of the penis. The chancroidal bubo, too, affects only superficial glands, and but one at a time; hence it is not only *monolateral*, but also is *monoganglionic*. A simple sympathetic bubo may accompany chancroid, and be cured by counter-irritation and other local measures, but the true chancroidal bubo invariably tends to suppuration, and the resulting ulcer is precisely similar in character to the original chancroid, and furnishes a contagious and auto-inoculable pus. The bubo of syphilis, on the other hand, involves a number of glands at once, and usually those of both groins; it is, therefore, *bilateral* and *poly-ganglionic*. The glands are indurated and distinct, not matted together by inflammation, and are seldom painful. Sometimes the central gland of the group is larger than those around it, forming what certain French writers have humorously called the "pleiade ganglionaire." The syphilitic bubo has in itself little or no tendency to suppurate and, when suppuration occurs, as it has in the case before us, this is due either to the influence of some external source of irritation, to the patient's possessing a scrofulous diathesis, or, perhaps, to the coexistence of a chancroid.

In the treatment of syphilis, mercury and the iodide of potassium are unquestionably the most valuable remedies. Most authorities teach that the chancre heals more quickly when mercury is given than when it is withheld, during the primary stage, and that the development of secondary lesions is, if not entirely prevented by the use of this drug, at least delayed, while the symptoms themselves are rendered milder.

Others, however, maintain that no mercury should be given until the beginning of the secondary stage. My own practice is to give mercury as soon as the diagnosis of syphilis is certain, being careful, of course, to avoid salivation, and stopping its administration if it seems to irritate the patient's system. If, however, there is any doubt as to the nature of the disease, or if mercury is for any reason contra-indicated, it is much better to be satisfied with local treatment, and the use of tonics if they should be required.

In the secondary stage of syphilis I prefer mercurial inunction to the internal use of the drug; half a drachm of the simple mercurial ointment may be well rubbed into the inside of the thighs, night and morning, or into the soles of the feet. The only objection to the treatment by inunction is that, if the patient's skin be very irritable, mercurial eczema may be developed. This, however, can usually be avoided by taking care always to thoroughly wash off the old ointment before making a new application. In children a few grains of the ointment may be smeared upon the belly-band.

In the first stage of syphilis, I would advise the use of the green iodide of mercury, which may be given in pill in combination with opium, to prevent its irritating the bowels. In the tertiary stage, if mercury is needed, the bichloride may be employed, combined with the iodide of potassium, and in connection with tonics, iron and cod liver oil. No local treatment is required for the early cutaneous manifestions of syphilis, but in the later, ulcerative forms, an ointment of iodoform containing gr. xv to ℥j may sometimes be employed with advantage.

Medical Societies.

INTERNATIONAL MEDICAL CONGRESS.

Abstracts of Papers.

While it will not be possible for us to give epitomes of all the numerous papers read before the International Congress, we select abstracts of such as seem the most important and generally interesting, quoting them from the London medical weeklies.

ON THE RÔLE OF SYPHILIS AS A CAUSE OF LOCOMOTOR ATAXY.

By W. Erb, M.D. (Leipzig). Professor Erb said that his recently published statistics on one hundred new cases of typical tabes in male adults (*Medicinische Centralblatt*, 1881, Nos. 11 and 12), showed: Cases without previous infection, twelve per cent.; with previous infection, eighty-eight per cent.; among them, with secondary syphilis, fifty-nine per cent; and with chancre, without secondary syphilis, twenty-nine per cent. Up to June 1st he had observed thirteen other cases. Among them there was but one without previous infection; of the remaining twelve, eight had had secondary syphilis, four only a chancre. In most cases the first symptoms of tabes occurred from the fifth to the fifteenth year after infection; a considerable fraction, however, occurred from three to five years after infection. On examining all male adults over twenty-five years old, of his *clientèle*, who did not suffer from tabes, and not directly from syphilis, he found seventy-seven per cent. who were never infected; twelve per cent. who had formerly secondary syphilis; and eleven per cent. who had only a chancre. The only possible logical conclusion from these facts was, that there must be a certain etiological connection between syphilis and tabes.

LOCALIZATION OF DISEASE IN THE BRAIN AND SPINAL CORD.

A discussion on this subject was opened by Dr. Brown-Séquard (Paris), who read a paper in which the following questions were proposed for consideration: 1. Are there parts of the brain and spinal cord which, being diseased, give rise to symptoms which no other parts can produce? 2. What is the diagnostic value of certain symptoms to show the seat of disease in the brain or in the spinal cord? 3. What gains have we made in diagnosis by the recent researches on localization of disease in the cerebro-spinal centres? As regards the first of these questions, he tried to show that, although there is no symptom which alone possesses an absolute pathognomonic value concerning the seat of the disease, there are, however, morbid manifestations, the coexistence of which establishes almost certainly, and sometimes quite certainly, that special parts are diseased. As regards the second question, he spoke of the connection: 1st. of aphasia with disease of the third frontal convolution, the island of Reil, and the occipital lobe on the left or on the right side; 2d, of the Jacksonian convulsions with some cerebral convolutions; 3d, of brachial, crural, facial paralysis, and of other kinds of monoplegia, with lesions of certain convolutions; 4th, of cerebral hemianæsthesia with disease of the optic thalamus or of the posterior part of the internal capsule; 5th, of hemichorea with disease of the corpus striatum or of the anterior part of the internal capsule; 6th, of titubation with disease of the cerebellum, and of some parts of the base of the brain; 7th, of diabetes with disease of the floor of the fourth ventricle; 8th, of labio-glosso-laryngeal paralysis with disease of certain groups of nerve-cells of the medulla oblongata; 9th, of some symptoms of labio-locomotor ataxy with disease of certain parts, and of other of the symptoms of that affection with disease of other parts of the posterior columns of the spinal cord; 10th, of paranæsthesia with disease of the central parts of the lumbo-dorsal enlargement of the spinal cord; 11th, of progressive muscular atrophy with atrophy of the nerve-cells of the anterior gray cornua of the spinal cord; 12th, of the essential infantile paralysis with small foci of inflammation of the part of the gray matter just named; 13th, of intermittent paraplegia with ischæmia of the dorso-lumbar enlargement of the spinal cord. As regards the third question, he showed that considerable advances had recently been made, although much less than was generally believed.

CONTRIBUTIONS TOWARD JACKSON'S EPILEPSY AND LOCALIZATION OF THE ARM CENTRE.

By F. Müller, M.D. (Graz). The following were the author's conclusions: 1st. Jackson's epilepsy is essentially different in clinical respects from genuine epilepsy. (*a*) The attack consists, as a rule, only of clonic convulsions; the ranges being generally very much developed, and beginning always in the same muscle or group of muscles, it remains either localized altogether, or extends only slowly. (*b*) Consciousness remains intact during the whole, or at any rate the greater part, of the attack, the patient being, in fact, the observer of his own attack. 2d. Jackson's epilepsy points, in its

well-developed forms, with certainty, to a cortical lesion, and allows, with the aid of the paralytic symptoms (different forms of monoplegia), which are either simultaneously present or follow the attack, the formation of a diagnosis not only of localization, but often also of the nature of the lesion. 3d. Oculo-pupillary and paralytic symptoms, *e.g.*, ptosis, narrowing of the pupil without refractory rigidity, etc., seem to form a frequent and very remarkable feature in the clinical picture. 4th. The arm-centre is situated in the middle third of the anterior and posterior central convolution, and in the adjoining part of the fissure of Rolando. 5th. Gradual destruction of this region by the formation of a tumor produces Jackson's epilepsy (which always begins in the arm), and in the further progress, paralysis of the entire upper extremity; while the muscles of the face, trunk, and the lower extremities remain completely intact from paralysis.

ON ADDISON'S DISEASE.

By E. Headlam Greenhow, M.D., F.R.S. (London). Dr. Greenhow referred to cases of disease of the suprarenal capsules published previously to Addison's discovery, and described a typical case hitherto unpublished. He also gave an account of the constitutional symptoms, the bronzing of the skin, the pathological appearances, the diagnosis, the causes of the disease, and its pathology. He said that the symptoms of Addison's disease were not due to the destruction of the suprarenal capsules and abrogation of their proper function; for, in some recorded instances, their normal structure must have been destroyed by the pathological process of the disease itself, previously to the development of the symptoms; and it had often been entirely supplanted by cancerous deposit without the occurrence of these symptoms. On the contrary, it seemed almost certain that the symptoms were to be attributed to the damage done by the pathological process to the nerves passing into the capsules, especially the branches of the pneumogastric nerve, and to the neighboring nerve-plexuses and ganglia, which were compressed by the contracting adventitious tissue in which they were embedded. The discoloration of the skin was probably due to the injurious effects of similar pressure upon the nerves of the sympathetic system, and, as shown by Dr. Paget's cases, might exist where the suprarenal capsules were healthy; but these nerves were embedded in and compressed by adventitious growth. This fact suggested a careful study of cases of pigmentation of skin unaccompanied by Addison's disease, in reference to the condition of the nerves, ganglia, and plexuses of the sympathetic system.

ON THE ORIGIN AND CURE OF SCROFULOUS NECK.

By T. Clifford Allbutt, M.A., M.D., F.R.S., (Leeds). The purpose of the paper was to insist on the local causation and the local development of many cases of scrofulous neck. While giving due weight to the undoubted influence of heredity in favoring this malady, yet that such states might be, and often were, set up in young persons by local causes alone was equally indubitable. Moreover, local causes played a large, perhaps, the chief part, in producing the malady in those originally strumous. Artificial scrofula was at least as common as the natural. Of local causes, irritation of neighboring mucous membranes was the most common; pharyngeal and aural-pharyngeal irritations being far the commonest antecedents, and the septic kind of these the most effective. The glandular enlargements were thus bubonic, and by caseous degeneration became themselves the foci of further like mischief. After minute inquiry into possible morbid influences acting through the mucous membranes, a rapid and complete cure without disfigurement must generally be sought by surgical means. Free incision and enucleation of caseous deposits were essential. The softening mass under the jaw was usually a subcutaneous abscess with more or less thickened walls, which depended upon infection from the deeper lying caseous glands. With these it communicated by sinuous channels, often very obscure. Upon the laying open of these, and the clearing out of the inner foci, care and future safety depended. Many cases were given in which Mr. Teale had coöperated with the author in carrying out these principles. Mr. F. Treves (London) agreed with Dr. Allbutt.

ON DIFFERENT FORMS OF BRIGHT'S DISEASE.

By Dr. S. Rosenstein (Leyden). The following is a summary of the paper: 1st. The anatomical basis of the disease described by Bright is the diffuse inflammation of the kidneys. 2d. Consequently those demonstrable renal changes, which are not of an inflammatory character—*e.g.*, "the kidney of pregnancy," the "cyanotic induration" observed in conditions of venous obstruction of the system, and the "pure amyloid degeneration," do not represent, though associated with anasarca and albuminuria, forms of Bright's disease, but are independent affections, strictly to be differentiated from this disease. 3d. Different forms of Bright's disease are to be distinguished anatomically as well as clinically, according to the "acute" or "chronic" course of the inflammatory process. 4th. The acute form is characterized by the emigration of colorless blood-corpuscles (as in inflammations of other organs), and by changes of the epithelial structures, to which, after a short duration, proliferation of the nuclei of the interstitial tissue is added. This form ends most frequently in recovery, and passes but extremely rarely into the chronic form. 5th. The chronic form shows anatomical changes in all the tissue elements of the kidneys. According to the preponderance of alterations in one or other of these elements, the product appears in the different conditions of the "large white," or the "variegated, smooth, contracted kidneys," or the "granular white kidney." 6th. The clinical observation of some exceptionally suitable cases renders it highly probable that the "white granular kidney" is developed from the "large white kidney," and is consequently to be looked upon as a further stage of the same process. 7th. A particular form of "granular kidney" is represented by the "red granular kidney," in so far as this form does not start from a diffuse inflammation, but from "endarteric changes" of the renal vessels, with shrinking of the glomeruli. Closely related to this form in its genesis is the

"senile contracted kidney," which is therefore to be associated with it. 8th. As to the starting point of the anatomical changes, no evidence is offered by clinical observation. The latter should, therefore, be limited to the recognition, in general, of the state of the diseased organ—*i.e.*, to recognize whether this is in the state of "enlargement" or of "contraction;" but it ought not to speak of "parenchymatous" or "interstitial" forms, as it does not possess any means of distinguishing between those.

ON RHEUMATISM, GOUT, AND RHEUMATIC GOUT.

By Jonathan Hutchinson, F.R.C.S. (London). The following propositions were laid down in this paper. 1. Rheumatism is, in the main, a liability to joint disease, brought about by exposure to cold and wet, through reflex nervous influences (a catarrhal arthritis). 2. Gout is, in the main, a liability to joint disease, brought about by certain articles of food, by defect of assimilation and of excretion (a humoral arthritis). 3. In each disease, although the joints suffer most prominently, they by no means suffer alone. 4. In each, by transmission through many generations, a diathesis is formed which is heritable, and which gives peculiarity to the diseases from which its subjects may suffer, and which stamps them as "gouty" or "rheumatic." 5. Gout and rheumatism are very frequently present together. Rheumatism is very often met with without gout, but gout is seldom present without rheumatism. Sometimes the two exist side by side, and attack the same patient at different times; but more frequently they become mixed, and produce a hybrid disease (rheumatic gout). In connection with hereditary descent, various maladies are to be affiliated with gout and rheumatic gout, which differ somewhat from both—certain forms of iritis; hemorrhagic retinitis; universal crippling rheumatism (chronic rheumatoid arthritis); some forms of glaucoma, lumbago, sciatica, and neuralgia; nodi digitorum, and possibly hæmophilia.

CHRONIC BRIGHT'S DISEASE WITHOUT ALBUMINURIA.

By F. A. Mahomed, M.D., (London). The main object of the paper was to prove that high arterial pressure in young and apparently healthy persons if it remains as a chronic condition, will produce the cardio-vascular changes of Bright's disease. It was held that the changes found in red granular kidneys are chiefly vascular in their nature; *i.e.*, thickened vessels, thickened Malpighian capsules, and fibro-hyaline intertubular thickenings; the yellow, or mixed granular kidneys, have, in addition to these interstitial small-celled growth and epithelial proliferation. Chronic Bright's disease was described as existing typically in three stages: 1. The functional stage, *i.e.*, high arterial pressure without organic change; 2. Chronic Bright's disease without albuminuria (or nephritis), *i.e.*, the cardio-vascular changes, usually with red granular kidney; 3. Chronic Bright's disease with albuminuria, or urine of low specific gravity, *i.e.*, the cardio-vascular changes with the mixed or yellow granular kidney. The present paper was to prove the existence of the second stage without albuminuria. It was founded upon sixty-one cases, in nearly all of which the urine was ascertained to be perfectly normal in quantity, specific gravity, and the absence of albumen, the latter being only occasionally present just before death. Nearly all these cases were diagnosed during life by hypertrophy of the heart and high arterial pressure. Of these, twenty-one cases were fatal, and an account of the *post-mortem* examination of each was given; in all the others the signs were unmistakable, there being in all displacement of the apex external to the nipple-line, and high arterial pressure; in many, evident thickening of the arteries, and other occasional signs. The cases were grouped as follows: cardiac failure, ten cases with eight deaths; lung failure, eleven cases, six deaths; cerebral disease, nine cases, two deaths; renal dropsy, nine cases, one death; gout, six cases; epistaxis, three cases; various medical and surgical diseases, nine cases, four deaths. There was also four cases with well-marked albuminuria, disappearing temporarily or permanently. The twenty-one fatal cases included five in which there was hypertrophy of the heart without valvular disease; in all, the vessels were thick, but there was little or no renal change.

THE ANALYTICAL STUDY OF AUSCULTATION AND PERCUSSION, WITH REFERENCE TO THE DISTINCTIVE CHARACTERS OF PULMONARY SIGNS.

By Austin Flint, M.D. (New York). The object of the paper was to indicate the pulmonary signs which are determinable by the analytical method of study, and the characters by which they may be readily distinguished. The auscultatory signs referable to respiration, the loud voice, and the whispered voice, were considered; and, afterward, the signs produced by percussion. The characters of the normal respiratory or vesicular murmur were brought into comparison with those of the sign known as the bronchial or tubular respiration. Under the head of bronchial respiration, a new term—broncho-vesicular respiration—was proposed to mark the different grades of solidification below the amount requisite for bronchial respiration. Cavernous respiration was shown to have characters clearly distinguishing it from bronchial respiration. Modifications of cavernous respiration, determinable by means of analysis and comparison, were distinguished as broncho-cavernous and vesiculo-cavernous respiration. A prolonged expiratory sound was stated, in the paper, to denote either solidification of the lung, or absence of solidification, by characters relating to pitch and quality. The existence or the absence of solidification could thus be ascertained by characters pertaining exclusively to expiration, when an inspiratory sound was wanting. The foregoing respiratory signs, referable to the loud voice, were next taken up. The distinction between simply increased vocal resonance and bronchophony was the object of analytical study. Ægophony was shown to be a modification of bronchophony, differing from the latter in an apparent distance of the resonance and an interrupted or tremulous character. Pectoriloquy, the transmission of speech or articulated words, denoted either a cavity or solidification of lung. The sounds caused by the whispered voice were considered of sufficient practical importance to form

a distinct group of physical signs. The abnormal modifications of the normal bronchial whisper were as follows: (1) increased bronchial whisper; (2) whispering bronchophony; (3) cavernous whisper; (4) whispering pectoriloquy. Whispering pectoriloquy might signify either solidification of lung or a cavity. The characters associated with the pectoriloquy enabled the auscultator to decide which one of these two anatomical conditions, in individual cases, was represented by the sign. The paper concluded with the results of the analytical study of the physical signs obtained by percussion. The number of morbid signs furnished by percussion need not exceed six, namely: (1) absence of resonance, or flatness; (2) diminished resonance, or dullness; (3) increased or vesiculo-tympanitic resonance; (4) tympanitic resonance; (5) amphoric resonance; and (6) cracked-metal resonance.

IMPROVEMENTS IN THE CONSTRUCTION AND APPLICATION OF THE FORCEPS.

By Professor Tarnier (Paris). After giving a general summary of the question, Dr. Tarnier said that two reasons had led him to give up the perineal curve of the forceps. 1. In direct applications, the forceps with the ordinary curve was easier to apply than the forceps with the perineal curve. 2. In oblique applications, the convexity resulting from the perineal curve came into contact with one of the ischio-pubic rami, and caused a deviation of the handle of the instrument, whose action then became defective. With forceps having the ordinary curve, when it was wished to impress upon the fœtal head a movement of rotation around the imaginary axis of the pelvic cavity, the handles of the instrument must describe externally an arc of a circle.

In the discussion which followed Dr. Fordyce Barker (New York) said that Tarnier's forceps was a most important step in advance. The only objection to it was the danger to the soft parts of the mother, which might be cut by it. Professor A. R. Simpson (Edinburgh) was of opinion that Tarnier's forceps was the best. It ensured traction always being made in the axis of the pelvis. The short forceps was a thing of the past. Dr. Budin (Paris) said he was a pupil of Professor Tarnier's and warmly defended his forceps, and supported it against the objections usually urged against it. Dr. Matthews Duncan (London) stated that, although Tarnier's forceps was an attempt at a scientific instrument, scientific instruments were not always necessarily the best. He thought the question could only be settled by experience. Professor Stephenson (Aberdeen) saw no improvement on the ordinary forceps in the modifications made by Dr. Tarnier. Dr. R. Barnes (London) considered Tarnier's forceps the greatest advance in scientific midwifery in late years. He, like Dr. Budin, supported it, and combated the various criticisms made by different speakers. Dr. Lombe Atthill (Dublin) had tried Tarnier's forceps, but preferred Barnes' long forceps, which he always used with success and satisfaction to himself.

BATTEY'S OPERATION.

Dr. Battey described his operation, and a discussion upon it followed. Dr. Marcy (Boston) had done two oöphorectomies *per vaginam*. Dr. Priestly (London) thanked Dr. Battey for his valuable paper. He was astonished at the revolution in abdominal surgery. Battey's operation should not be performed except as a *dernier ressort*. He had observed that the ovaries varied in size, just like the testicles. Mr. Knowsley Thornton (London) had operated five times, with success. He was disappointed at the large mortality of the operation. He had failed to cure dysmenorrhœa by it. He complained that the after history of the cases operated on had not been fully reported. Professor Martin (Berlin) had twice performed oöphorectomy. The first case was one of uterine tumor, and was successful. The second case was one of dysmenorrhœa, and the operation had not relieved the symptoms for the cure of which it had been undertaken. Dr. Heywood Smith (London) said that the presence of adhesions was a frequent source of difficulty. Mr. Lawson Tait (Birmingham) was pleased to find the operation so favorably received. He had had five deaths out of twenty-six cases, in which he had removed the ovaries on account of fibroid tumors. Dr. Bantock (London) related a case in which he had operated for the relief of menorrhagia. Dr. Goodell (New York) had not had much experience in the operation. He asked why it was so fatal. He had performed the operation by the vagina and by the abdomen. He preferred the abdominal section, and in future should operate by that direction. He was of opinion that Battey's operation should be resorted to in cases of insanity. Mr. Spencer Wells (London) had only operated once, and then with success. It was difficult to avoid wounding the intestines. He had not seen cases requiring the operation. Dr. Pallen (New York) had performed the operation several times. Dr. Matthews Duncan had sanctioned the operation in one case. The sufferings of neurotic women were exaggerated.

(*To be continued.*)

EDITORIAL DEPARTMENT.

PERISCOPE.

Eserine in Atropia Poisoning.

Although experimental research has long since proved the antagonistic effects of belladonna and calabar bean, but few cases of poisoning, where one has been used as an antidote for the other, have hitherto been published. We, therefore, copy in full, from the Louisville *Medical News*, the following report by Dr. Andrew Seargent, of a case of atropia poisoning successfully treated by eserine:—

Mr. R., aged thirty-four years, occupation

saloon keeper, on the evening of July 21, 1881, took by mistake half a grain of sulphate atropia and three-fourths of a grain sulphate of morphia immediately before eating supper, at 6.30 o'clock, P.M. Soon afterward he discovered the mistake he had made, and went to the druggist who had filled the prescription. The druggist became alarmed, and at once gave him thirty grains of pulv. ipecac and told him to consult a physician. He went to Dr. J. A. Brady, who started him with a friend to the City Hospital, with the instruction to take active exercise as long as possible. He arrived at the hospital at 8.15 P.M., unable to walk without assistance, and exhibiting all the characteristic signs of atropia poisoning. His pulse at this time was 120 and respiration 30. The emetic the druggist had administered having failed to produce emesis, I gave him thirty grains sulphate of zinc. Ten minutes later I gave him an ounce of mustard in a strong solution of common salt, followed by warm water, given freely. This soon produced free emesis, but failed to improve his condition in the least. He grew rapidly worse, and soon became comatose; pulse 136; respiration 36; the exercise had to be discontinued. I sent a messenger for some eserine, not having any at hand, but administered one grain of sulphate morphia hypodermically at 9.10 o'clock, P.M. This produced no change in his condition, and in about fifteen minutes he had a convulsion, which lasted for some time, during which there was very decided opisthotonos without any apparent rigidity of the extremities. At 9.40 o'clock, P.M., his pulse was 140, respiration 9 to the minute, and very shallow. Dr. J. A. Brady, his family physician, whom I had sent for, having arrived, we held a brief consultation and decided to stimulate respiration by means of electricity, and to draw off the urine. Electricity was continued for an hour with only a slight improvement in his respiration, and in attempting to draw off the urine we found the bladder almost empty.

At 10.45 P.M. we obtained a solution of eserine and administered one-sixteenth of a grain hypodermically. In less than ten minutes his respiration and circulation began sensibly to improve. In fifteen minutes he was able to raise himself up, and asked for a drink of water, saying that he felt as bright as a new twenty-dollar gold piece. He now vomited quite freely, and walked to the ward assigned him, with a little assistance (11.15 P.M.).

At 1.30 o'clock, A.M. I was called to see him, and found him comatose and oblivious to his surroundings. Pulse was 120, very weak, respiration 14, pupils as widely dilated as when first seen. I immediately gave him one twenty-fourth grain of eserine hypodermically. He began to improve at once, and in ten minutes was wide awake and perfectly rational. I again used the catheter, but did not find any urine, although the patient thought his bladder was full.

Visited the patient at 6 o'clock, A.M., July 22d, and found him sitting up and anxious to leave the hospital. Respiration deep and 18 to the minute; pulse regular and 96 to the minute: pupils still dilated, and mouth dry. Patient was unable to urinate.

I visited him again at 9.30 A.M. and found everything normal except pupils, which were slightly dilated. Patient had not urinated, and had no desire to do so. I then ordered an infusion of digitalis with acetate of potash, which soon produced free diuresis, and in due time the patient was discharged well.

The Treatment of Spermatorrhœa.

The Chicago *Medical Journal and Examiner* contains an excellent paper on the pathology of involuntary spermatic fluxes, which was read before the Eastern Kansas Medical Society, by Dr. Geo. H. Picard, of Topeka, Kan., who holds, with Lallemand, that spermatorrhœa is a local disease, a production of an irritation of the prostatic portion of the urethra and seminal ducts, and not a neurosis, as claimed by more recent writers. With regard to treatment, he says:—

Be certain of the diagnosis; it is a somewhat rare disorder, and all passive fluxes from the urethra should be doubtful until the microscope has told the story; treat nervous complications as intelligently as you would those arising from any other cause; and use some approved form of local treatment. I agree with Bartholow, that the *porte caustique* of Lallemand is a somewhat dangerous agent in unskilled hands, but it is very efficient in the hands of the surgeon who knows the parts and the instrument. The tanno-glycerine is about as desirable as the caustic, and has the merit of being harmless. I have injected a drachm or more of the tanno-glycerine—$\frac{3}{j}$–$\frac{3}{ij}$—at intervals of a week or so, until a cure was effected. These injections may be made in various ways. The universal syringe can be attached by means of the screw to a silver catheter, which can be introduced into the prostatic urethra. There are hard-rubber syringes especially constructed with long, curved, bulb-tipped nozzles, which answer the purpose most admirably. Various other astringent injections are of great service, the only requisite on the part of the surgeon being ordinary skill and attention.

Conservative Surgery.

In reply to an article by Dr. J. B. Murdoch, published in the Cincinnati *Lancet and Clinic*, June 11th, 1881, in which the writer holds that it is impossible for any human limb to retain its vitality after being run over by a railroad car, and that such cases invariably necessitate amputation, Dr. H. Nye, of Enon Valley, Pa., reports the following interesting case in the Pittsburgh *Medical Journal*, for August:—

March 4, 1878, I was called to see a man, A. H., aet. 18, who, I was informed, had been run over by the cars. I found my patient lying on a lounge in the bar room of a hotel. He had a long heavy overcoat on which extended below the knees. He also had on a heavy lined pair of trowsers and overalls. Upon removing the clothing I found a fracture of the tibia and fibula through the thickest part of that bone, about two or three inches below the knee joint. I also found the flesh severely bruised on both lateral sides of the site of fracture. There was a good deal of oozing of venous blood, passive in character. There was no displacement of the fragments, and I could not discover that the bones were crushed or com-

minuted, or that the fracture or contusion extended into the joint. Upon inquiring how the accident occurred, I was informed that the man had got in the way of a *slowly* moving car without having noticed its approach till too late to get out of its way; that in trying to get out of its way he was thrown down and run over by the car, or rather that one wheel passed over his right leg just below the knee. It was noticed that the long overcoat he wore had got in some way wrapped around the leg over which passed the car wheel. The car stopped, or was stopped before another wheel passed over. Upon a careful consideration of the nature of the injury, the manner in which it occurred, and what to me was a weighty consideration, that the boy was in good condition, of good habits, sound constitution, plenty of grit, etc., I concluded to give him a chance to save his leg, even though it was at the peril of his life. I put the leg in a fracture box. I did not use extension, as there was no displacement, and I applied cold water dressings just as long as they were agreeable to his feelings. There was a good deal of traumatism for a few days, and in a week or ten days the parts over the site of the fracture that were so severely contused sloughed and came away, leaving a healthy granulating ulcer, which healed readily. I might here say that the hemorrhage from this contused part had been controlled by covering it with subsulphate of iron in powder, and then applying pressure by the hand over all; this may account for the ready healing of the wound On the 29th of March the boy was sent home to his parents. He made a rapid recovery without any shortening or deformity whatever.

A Case of Subacute Ovaritis.

The following clinical case is reported by Dr. A. W. Foot, in the Dublin *Journal of Medical Science*, August:—

A young girl (seventeen), Alice G., applied for advice, 28th May, with severe pain in the right iliac fossa, so sharp she "could hardly breathe," and interfering with her standing and walking. She had frequent sickness of stomach, no appetite, moderate fever. This pain had come on suddenly, without assignable reason, on the last day of a catamenial period. There was great tenderness over the right ovary. She was kept in bed, at rest, on her back, with poultices over the seat of pain, and given bromide of potassium (7½ grs. three times a day). In a week she got up, at her own request, but was weak, and unable to continue long out of bed at a time. She was now given some wine, and a mixture with tartarated iron. She went out well on the 6th June. This may have been merely ovarian hyperæsthesia, but it was also suggested to you that it might have been a case of subacute ovaritis, or of local peritonitis arising from the bursting of a Graafian vesicle into the cavity of the peritoneum. Hughes Bennett reports a case of peritonitis from this cause; the patient was admitted into the hospital on the sixth day, and died on the eleventh day. He adds that he has since seen three other cases of the same kind, all of which recovered. In none of these latter, he remarks, were leeches applied.

The Treatment of Typhoid Fever by Salicylate of Soda.

M. Caussidou made a communication to the meeting of the French Association for the advancement of Science at the Congress of Algiers, (London *Medical Record*) which was based on thirty-two cases of typhoid fever treated by salicylate of soda, and in which the rise of the temperature and the influence of this drug on the febrile process had been registered with the greatest care, as attested by numerous tracings shown by the writer. M. Caussidou arrived at the conclusion, in opposition to the facts observed in several wards of the Paris hospitals, that salicylated medication gives larger, more certain, and more permanent effects than refrigeration. M. Caussidou has even been in doubt if, by administering salicylate of soda from the outset of typhoid fever, it would not be possible to limit the duration of the disease to the first week (?), and if, at least, it would not be possible to obtain a number of cases belonging to the abortive form. Nevertheless, M. Caussidou does not conceal the dangers of salicylate medication. Like other observers, he has noted dyspnœa. præcordial trouble, and exhaustion in patients where the salicylate of soda has brought on a too sudden apyrexia. To avoid these objectionable results, he proposes to administer salicylate of soda in fractional doses of one gram given every two hours, and to stop so soon as the temperature falls below 38° Cent. (100.4° Fahr.) In a complicated case of erysipelas the salicylic medication was powerless to produce a febrile recrudescence brought on by this complication. M. Hérard declared that he had nothing but commendation for the use of antiseptics, such as carbolic and salicylic acids, in the treatment of febrile diseases.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Among the pamphlets recently received are: A reprint from the *Annals of Anatomy and Surgery* for August, 1881, containing a paper on the "Surgical Anatomy of the Sheaths of the Palmar Tendons," by Dr. Rowell Park, of Chicago.

A reprint from the Transactions of the *American Neurological Association*, vol. ii, 1877, containing two valuable papers; the *first*, "A Clinical Contribution to the Study of Post Paralytic Chorea"; the *second*, "A Contribution to the Study of Localized Cerebral Lesions;" both by Dr. E. C. Seguin, of New York.

A reprint from the *Medical Record*, on "Tenotomy in the Treatment of Congenital Club-foot," by Dr. A. P. Morgan Vance, of New York.

"Glaucoma Caused by Mental Worry," from the Detroit *Lancet*, a paper by Dr. Leartus Conner, of Detroit, Mich., of which we have previously given an abstract.

A reprint from the Transactions of the American Medical Association, 1880, on a case of "Stenosis of the Larynx," with fibrous adhesive bands of the true vocal chords; tracheotomy, rupture of bands and cure of stenosis by general and local treatment. Also some remarks concerning the "Value of the Galvano-cautery in the Treatment of Diseases and Growths of the Naso-pharynx," by Dr. W. H. Daly.

"State Medicine; What has been Accomplished and what is Needed in Indiana," by Thaddeus M. Stevens, M.D., of Indianapolis, Ind., reprinted from the Transactions of the State Medical Society, 1881.

——Dr. DeForest Willard sends us, in a reprint from the Philadelphia *Medical Times*, a paper on "Hip Injuries, Including Hip-joint Diseases and Fractures of the Femoral Neck, with Splint for the same," and also a reprint from the Boston *Medical and Surgical Journal*, a report of a case of "Hip-joint Disease, with Death in the Early Stage, from Tubercular Meningitis," giving microscopic appearances, with cuts by Dr. E. O. Shakespeare.

——We have also received the "Ninth Annual Report of the Board of Managers of the Church Dispensary of Southwark," No. 1719 South Ninth Street, Philadelphia, with Charter and By-Laws.

——The *Indiana Medical Reporter*, which during the past year has frequently furnished us with valuable information, has now successfully passed through its infancy and has developed into a more cosmopolitan organ, under the new title of the *Western Medical Reporter*. It numbers among its editorial staff gentlemen from several States who, we have no doubt, will fill their promise of keeping it in the front rank of medical journalism. It is a monthly journal, published at the low price of $1.00 per annum.

——*The American Pulpit and Pew* is the title of a new religious paper, of which we have received the first two numbers. It is edited by the Rev. E. B. Raffensperger, of this city, and published monthly, at the price of 50 cents a year, or five cents per number. We have looked carefully through the advertising columns for quack advertisements, with which papers of that class are usually overflowing, and must confess how agreeably we were disappointed, when, beyond the notice of a certain electric battery, which is warranted to prevent and permanently cure almost every disease, we found nothing at which honest men need blush.

BOOK NOTICES.

Transactions of the South Carolina Medical Association, Thirty-first Annual Session, held in Newbury, S. C., April 19th, 20th and 21st, 1881. pp. 127.

Transactions of the Mississippi State Medical Association, Fourteenth Annual Session, held in Winona, April 6th, 7th and 8th, 1881. pp. 196.

Minutes of the State Medical Society of Arkansas, at its Sixth Annual Session, held at Little Rock, April 27th, 28th and 29th, 1881. pp. 43.

The address of Dr. B. W. Taylor, president of the South Carolina Medical Association, was on the "Hygiene of Infancy." It was carefully prepared, but nothing new on the subject was presented. Numerous papers on subjects of general interest were read. All of these were remarkable for their brevity, a characteristic which cannot be too highly praised. We have not the space to notice all of these; but will mention the following, which seem to us of special interest: Dr. F. F. Gary, of Abbeville, reported a case of acute chorea successfully treated with large doses of veratrum viride. Dr. Thos. J. M'Kie, of Edgefield, read a very interesting, and in every sense valuable, paper on the "Negro and some of his Diseases." The subjects of the other papers were of no less importance, but they were such as are more familiar to us all.

Dr. W. F. Hyer, president of the Mississippi State Medical Association, chose for the subject of his address the following motto from the Seal of the Medical Association of the State of Tennessee: "The Science of Medicine an Important Department of the Science of Humanity." The subject was well handled; among other things, the speaker pleaded for medical legislation, and impressed on his hearers the importance of agitating the matter until the passage of some law, no matter how imperfect, be accomplished. The Hon. J. S. Morris, of Vicksburg, read an address on the "Rights, Duties, and Responsibilities of Physicians before Courts"; The "Abortive Treatment of Pneumonia" was the subject of a paper by Dr. W. Y. Gadbury, of Yazoo City; "New Remedies," by Dr. B. A. Vaughan, of Columbus; "Diphtheria," by Dr. J. B. Gresham, of West Point; "Recent Advances in General Pathology," by Dr. B. F. Ward, of Winona; Dr. M. S. Craft, of Jackson, chairman of Committee on Surgery, presented a lengthy report upon the "Surgery of Mississippi." A new appliance for fracture of the lower extremities was exhibited and described by Dr. W. Y. Gadbury.

At the meeting of the State Medical Society of Arkansas, Dr. Lenow, of Little Rock, delivered the address of welcome, which was characterized by the usual eloquence displayed on such occasions. The president, Dr. William M. Lawrence, of Batesville, in his address, prayed that, when the Legislature next meets, the good Lord would deliver them from any act regulating the practice of medicine. The remainder of the volume is filled with Committee Reports and Resolutions. No papers were read.

Text Book of Modern Midwifery. By Rodney Glisan, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children, in the Medical Department of the Willamette University, and late President of the Oregon State Medical Society. With one hundred and thirty illustrations. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881. 8vo, pp. 639. Price, cloth, $4.00; sheep, $5.00.

This work has been written with the object of producing a text-book which shall represent the obstetric art as practiced in America at the present day, and it owes its origin to the fact that existing works by American authors are more or less antiquated, so that students and practitioners in this country have had largely to depend on European text-books. The author introduces the subject with a brief review of the history of midwifery, and the changes in practice within the past twenty years, and then proceeds to discuss the anatomy and physiology of the female organs concerned in reproduction. The growth and development of the fœtus and the modes by which it derives its nourishment, are next considered. Many of the purely theoretical questions the author deals with by presenting the views held by various authorities, without definitely committing himself to one or the other. The more practical portion of the work, embracing the diagnosis of pregnancy and the management of labor, as well as the after treatment, is stamped with the same spirit of moderation. On the vexed questions of to-day, the use of the forceps, anæsthetics, etc., he commits himself to neither extreme. He regards the forceps as one of the most valuable of instruments and even advocates their introduction into the cavity of the uterus in some cases; yet he thinks that the tendency now is toward their too frequent employment.

With regard to anæsthetics, he advocates their moderate use, especially in the second stage of labor, but thinks that they should rarely be pushed beyond easing the pains sufficiently to make them endurable, and where these are not very severe, anæsthetics should be dispensed with altogether. Chloroform, or a mixture of chloroform with ether or alcohol, he regards as the best agent, unless it be desirable to produce complete anæsthesia, when he thinks that ether had better be used, on account of the supposed paralyzing effect of chloroform on the heart's action. He also mentions other agents, as bichloride of methylene, hydrobromic ether, etc., but does not think them in any way superior to those ordinarily in use. The work, which shows evidence of extensive reading on the part of its author, is characterized throughout by its simplicity of style and the excellency of its precepts, coupled with modesty of expression. In vain do we look for the enthusiasm of the hobby-rider, which, no matter how interesting to read, is out of place in a text-book for students.

Chemical Analysis of the Urine. Based in part on Casselmann's Analyse des Harns. By Edgar F. Smith, PH.D., Asa Packer Professor of Chemistry in Muhlenberg College, and John Marshall, M.D., Demonstrator of Chemistry, Medical Department, University of Penna. With Illustrations. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881. Cloth, 12mo, pp. 104. Price $1.00.

With the excellent works on urine analysis already in existence, we had hardly expected to see anything new for some time. Notwithstanding this the present treatise has its claims on the profession, and is intended by its author to fill a *gap*. The chief characteristics which recommend it are, *first*, brevity, and *second*, more attention to the chemical side of the question than is usually found in similar treatises. While it can never supersede such works as *Tyson's* and others, it certainly will aid the student in performing *understandingly* and with accuracy the principal analyses called for in practice. It is an admirable hand-book for laboratory work. The authors have introduced the decimal system of weights and measures, as well as the Centigrade scale of thermometer.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. Von Ziemssen, Professor of Clinical Medicine in Munich, Bavaria. Vol. xx. General Index. New York: William Wood and Company, 27 Great Jones Street. 1881. Leather. 8vo. pp. 499.

This volume contains a complete index of subjects, authors, etc., in the preceding volumes, referring the reader in each case to the volume and page, and thus by the use of this general index much time may be saved.

THE

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D. G. BRINTON, M.D., EDITOR.

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THE DEATH OF OUR LATE PRESIDENT.

A thrill of grief unprecedented in the annals of our country passed through our land when it was announced that the long struggle for life had ceased and that the suffering patient was no more. Prepared, as every one was, for this sad termination, it nevertheless came with the force of an unexpected shock, and few there were who did not feel as if some one near to them in friendship or kinship had been summoned into that invisible world which forever surrounds us.

Now that we can look back, with full knowledge of the lesion, on the treatment pursued, we must agree, whether planned with wisdom or partly governed by circumstances, it was, on the whole, as judicious as it could have been. A gunshot wound of the character caused by the assassin's bullet is, in a person of President Garfield's age, necessarily fatal; at least, the favorable chances are so infinitely small that it was to all intents and purposes a fatal wound, and the most that can be asked of surgery in such a case is to relieve suffering and prolong life for a little.

There is no doubt but that the results of the post-mortem, which we give on another page, as reported in the daily papers, pending a more detailed account, were a surprise to the public and to several if not all of the attending surgeons. Probably had the facts been known the treatment would not have been much modified. It seems to have been as suitable as, on reviewing it, one could well designate.

The autopsy contains in its development a severe rebuke for those who, on the one side, being in daily attendance on the patient, so confidently and frequently insisted that he would certainly recover, that there was no pyæmia, etc., etc.; and, on the other side, for those surgeons who, not being in attendance, and never having seen the case, criticised the treatment in the daily papers, and were so ready with suggestions and animadversions, all of which, we now see, were uncalled for and out of place. The desire to rush into notoriety was at the bottom of both these exhibitions of imprudence, and doubtless those who committed them have already regretted their hasty actions. Among the many lessons of the case, this, too, may be of use for future guidance.

NOTES AND COMMENTS.

Vaccination in Malignant Charbon.

The recent experiments of M. Pasteur and other French savants on the virus obtained from sheep suffering from malignant charbon have led to very remarkable results.

By culture of the bacteriæ obtained from this virus, M. Pasteur has succeeded finally in procuring an attenuated virus, with which, he asserted, sheep might be inoculated with impunity and rendered incapable of contracting the malignant disease. These assertions were recently put to the proof, before a special commission named by the prefect of one of the departments where the disease is common. Nineteen sheep were primarily vaccinated with M. Pasteur's attenuated virus, and later on were inoculated with virus taken from a sheep which had succumbed to the malignant disease; at the same time sixteen sheep were taken from the flock and inoculated with the same virus.

The results were completely in accordance with those obtained by M. Pasteur in his experi-

ments; three days after the inoculation fifteen of the unvaccinated sheep were dead, while the nineteen which had been vaccinated were perfectly well and had not presented any morbid symptoms.

These experiments at Chartres thus absolutely confirm those at Melun; many farmers from the neighboring district watched the experiment with interest, and several desired to have their flocks vaccinated, to preserve them from the disease which has proved a scourge in several departments.

Treatment of Gonorrhœa.

In a recent work, M. Bourgeois strongly recommends the following injection, after the painful period has passed:—

℞. Potass. permanganat., gr. j
Aquæ destill., ℥ v. M.

This solution is apt to stain the linen, which renders its use somewhat inconvenient.

Capsules containing only the resin of copabia were recently exhibited at the Societé de Thérapeutique. The idea of this treatment originated with Gubler, who asserted that it was the resin alone which was eliminated by the kidneys, and had any curative effect in gonorrhœa; while the volatile oil eliminated by the lungs gave the odor of the balsam to the breath, and induced the skin eruption.

During the discussion, M. Constantin Paul spoke very favorably of the extract of cubebs, by which alone the drug might be administered in large doses, which sometimes prove successful in checking the disease at its debut.

Chloroform Inhalation in Stramonium Poisoning.

A correspondent of the *Lancet* gives the following interesting case:—

In the latter part of last year, at midnight, I received a very pressing call. At the midday meal a family had partaken of a dish of boiled stramonium leaves, in mistake for greens. The parents and one child, who had soon discovered their mistake, were not very seriously affected; but the son, aged eight, having eaten a considerable quantity, quickly showed dangerous symptoms, and, although he vomited shortly afterwards, became wildly delirious. When I arrived the boy had been in this state eleven hours and a half, and seemed to grow worse.

The action of chloroform appears to be antagonistic to that of the deliriants. Professor Schäfer has recommended the use of atropia during the inhalation of chloroform. Bearing this in mind, I determined to try chloroform inhalation in this case. The result exceeded my expectations. In a few seconds the boy became quieter, roused himself to vomit about a handful of dark green leaves, then again became quiet. His face regained its normal tint, and in five minutes he appeared to be in a natural slumber.

The boy slept thus through the night and got up to his breakfast quite recovered.

Inhalation of Cold Air in the Treatment of Pneumonia.

Dr. J. Turner Everett, of Sandusky, O., states, in a communication to the New York *Medical Record*, Sept. 10th, 1881, that the continuous inhalation of cold air, ranging from 10° to 15° Fah., while the patient is kept in a room with a temperature of from 80° to 85° Fah., will, in the early stage of pneumonia, act as an abortive, and bring the disease to a speedy termination. His explanation is, that the cold air, coming in direct contact with the tissues of the pulmonic parenchyma, abstract heat from the blood, and by carefully noting the external temperature and that of the patient, this abstraction of heat can be regulated with the utmost nicety and precision—can be commenced or stopped instantly, without prostrating the nervous system by sedatives or narcotics, and without the loss of blood.

This cold air in thus coming in contact with the lung tissues causes contraction of the vessels, thus lessening the amount of blood admitted to the lung tissues, and by its constringing influence tends to drive out that which has become partially deposited by the stasis, while by increasing the oxygenation of that already admitted it hastens resolution. The increased heat of the air surrounding the patient favors copious perspiration, thus, by the evaporative process, favoring the additional abstraction of heat.

In winter, when the atmosphere out-doors is cold, he causes the patient to breathe through a rubber tube, one end of which is inserted through a hole in the window sash, while the other end, fitted with a proper face piece, is given to the patient. In treating a few cases that might occur in the summer, the air should be drawn through a refrigerator. The history of eight cases are given, all of which recovered rapidly.

The Medicinal Use of the Tomato.

Dr. T. K. Griffith, of Hollyrood, Kansas, has found the tomato, eaten raw, or in the form of a fluid extract prepared from the fruit without the use of heat, a very valuable remedy in the treatment of nurse's sore mouth and "canker." In

the *Therapeutic Gazette*, for September, 1881, he states that in the summer of 1874 he was treating a case of nurse's sore mouth with chlorate of potassa, carbolic acid and glycerine, iron, quinine, etc. When the earliest ripe tomatoes of the season came into market, the patient saw them, and craved them as food. He directed that she be allowed some; she ate some, and continued to crave them, which craving he allowed her to satisfy. There was a marked improvement in the case from this time; the mouth healed, the appetite returned, and the patient gained strength. Since then he has employed the tomato in a large number of cases, and always with the same success.

Ergot and Bromide of Potassium in the Treatment of Sea Sickness.

Dr. T. S. Hopkins, of Thomasville, Ga., recommends, in the Atlanta *Medical Register*, for October, 1881, the following prescription, which he has found very successful:—

℞. Potassii bromidi,
Ext. ergotæ, fl., (Squibb) āā ℥ ss
Aquæ, ad ℥ vj. M.

Sig.—Tablespoonful; repeated, if necessary, three times daily.

He was induced to try this combination because of the well known power of ergot to contract the arteries, and because the bromide alone had always failed him. He says that it is preventive as well as curative. Ergot was suggested by Professor W. S. Haines, of Chicago (in a private conversation with a medical friend), in 1874, on theoretical principles.

Oakum in Affections of the Joints.

M. Constantin Paul, at the Hospital Lariboisière, has been employing oakum with great success in the treatment of subacute and chronic affections of the joints. It is simply wrapped round the painful joints, to the thickness of one-half to one inch, and left there. He found it especially useful in gonorrhœal arthritis of the knee, in arthritis deformans, and in all cases where the application of iodine is usually recommended.

Hypertrophy of the Spleen in Children.

Dr. Bouchut, in a clinical lecture at the Hôpital des Enfants Malades, on hypertrophy of the spleen, due to palustral influences, and not amenable to ordinary treatment, referred to three cases, one of four years of age, another of two, and a third of ten, which presented enormous spleens, forming tumors, and inducing aneurism, leucocythæmia, and the cachectic condition, so difficult of removal. Quinine, arsenic, cold douches over the region of the spleen, had all been employed without success. Splenotomy had not been performed on any of them, but in Dr. Bouchut's opinion this operation is the only resource when ordinary therapeutic agents are without avail, and the patients would otherwise rapidly arrive at the fatal end.

Leucorrhœa in Children.

M. Bouchut recommends the following method of treatment in the leucorrhœa sometimes observed in young children:—

1st. Frequent lotions of the parts with bran water, Goulard's solution or infusion of oak leaves.

2d. Touch the vulvo-vaginal mucous membrane with the following solution:—

℞. Hydrarg. bichlorid., 10 centigrs.
Aq. destill., 300 grams. M.

or with

℞. Argent. nitrat., 20 centigrs.
Aq. destill., 30 grams. M.

And place between the labiæ majoræ, charpie wetted in antiseptic solutions.

3d. Administer tonics, reconstituents and the remedies proper for any diathesic disease that may exist.

Treatment of Chronic Bronchitis by Cauterization.

Dr. Barth publishes, in *La France Médicale*, a remarkable case of recovery under this treatment, which he believes will be successful under similar conditions. A young woman had a chronic bronchitis, the sequel of an acute attack three years before. The usual remedies had been tried in vain, when M. Barth had recourse to the idea of making slight punctures by the thermocautère over the thoracic walls. The whole back was thus covered with small spots of cauterization. On the next day the dyspnœa was markedly less. Three days afterwards there was a second application, attended by further improvement; there were altogether six cauterizations, and in four weeks the patient was discharged cured.

Action of Digitalis Preparations.

Some experiments published by Dr. Fränkel in the *Annalen des Charité Hospitals*, give the following results: 1st. The tincture, and also the acetum and the infusion of digitalis, are capable of exercising and exciting influence upon the inhibitory nerves of the heart, and

upon the vaso-motor centre; but there are unmistakable grades of distinction in the action of the three preparations. 2d. The tincture is the least reliable. 3d. The action of digitalis—retarding of the pulse and increased blood-pressure setting in, after divers large doses of both the infusion and the acetum—sets in according to the individuality of the animals, and other accessory circumstances. 4th. The acetum digitalis is the most powerful.

Special Reports.

NO. XVII.—THE LAWS OF MALPRACTICE.

The questions of how far and under what circumstances a medical man is amenable to the laws of malpractice have for every practitioner not only a professional but likewise a personal interest, for he knows not how soon he shall have to face a jury, and be compelled to defend the course he has pursued in the treatment of any given case. As a general rule, questions of malpractice rarely arise in the province of medicine, pure and simple; the surgeon is, as a rule, more apt to be made to feel the sting of the law's lash than his brother who eschews the knife and seldom deals with splints; still there are occasions when even the general practitioner may be placed in the unenviable situation of defendant in a malpractice suit, or the victim of unacquaintance with some of the laws which government has seen fit to hedge him around about with. A knowledge of a number of decisions which have recently been rendered by the courts of three or four of the different commonwealths, in some cases the superior courts rendering the judgments, should be disseminated throughout the ranks of the profession, in order that each may know when he is liable and when not liable for damages.

An interesting question has arisen lately in this city (Philadelphia) as to when a physician may issue his certificate of death, and when he will be debarred from using the privilege which the law confers upon him. The law, in its wisdom, at least, so far as this State is concerned, puts a limit to the time within which a doctor must have seen an individual in life, in order that his certificate shall properly and legally cover that individual's death and burial. That such a law is a necessity is evident to every thinking man in the community, for it undoubtedly affords a means of protection for the living against the perpetration of secret crimes, and tends to lead to their detection by increasing the number of checks upon all concerned in the interment of dead bodies; either owing to a lack of knowledge of the provisions of the law, or to a misunderstanding of its meaning, one may unwittingly bring himself into the unpleasant predicament of having to learn the full force and meaning of the old maxim, "that ignorance of the law excuses no man." On the twenty-second day of March, 1867, the State Assembly passed a law entitled "A law for the guidance of physicians in returning deaths to the Coroner" which law reads as follows:—

"It shall be the duty of the Coroner of the city and county of Philadelphia to hold an inquest on the body of any deceased person who shall have died a violent death, or whose death shall be sudden, Provided, that such sudden death be after an illness of less than twenty-four hours' duration, and that no regular practicing physician shall have been in attendance within said time, or that suspicious circumstances render the same necessary, which said suspicious circumstances shall first be sworn to by one or more citizens of said city. Violent deaths include homicide, deaths from criminal abortion, infanticide, suicide, deaths *from any kind of accident*, such as injuries from being run over in the street, from machinery, from falls, burns, scalds, accidental poisoning or drowning. In any of the above or like cases it is the duty of the physician to refuse to give a certificate of death, and the Coroner should at once be notified. Any physician violating the provisions of this act of General Assembly shall be fined in a sum not exceeding £100."

Now one or two interesting questions may arise under this law: the act provides that if the death happens within twenty-fours from the time of the onset of the disease, accident or what not, and that no regular physician has been in attendance, then and in that case report must be made at once to the Coroner; but, by construction, the law also goes further; it is not sufficient only that the case shall have been seen twenty-four hours before death, but that if the slightest suspicious circumstance surrounds the death it is a coroner's case. Again, according to the practice of the coroner's office in Philadelphia, where a physician is called within twenty-four hours of the time of death, it being his first visit to the patient, or the first after a prolonged interval, and finds him suffering from a chronic trouble (such as phthisis, etc.) of which he dies within the specified time, no matter whether there be suspicious circumstances or not, it is his duty to report such death to the coroner, and receive the permission of that officer before issuing his certificate of death. Now, supposing that the doctor has been in attendance during a prolonged period, seeing the patient off and on, say every few days, or every week or ten days, and the case dies in the interim between the usual visits, shall a certificate be

issued? the law says yes, unless, in the good judgment of the attending physician, an investigation of the cause of death should be made.

An interesting case coming under this last proviso is still fresh in the recollection of the community: A physician being summoned three days or more before death, to attend a sick person, having at infrequent intervals seen the deceased previous to that time, was called on to issue his certificate for the burial of the person, who had died at the end of the thirty days, of what purported to be inflammation of the stomach. Now the doctor had known the lady and her family for many years, and while no particularly satisfactory cause could be assigned for the inflamed stomach, etc., with which he had to deal, yet no suspicion arose in his mind that foul play either had been or was contemplated. The woman died, and the necessary papers having been demanded they were issued by the doctor, thus permitting of the burial of the corpse. Some days after interment suspicions arose that all was not clear and above-board, in regard to the deceased's death, and an investigation was prompted. This was made, the body being disinterred for the purpose, when it was demonstrated that, beyond the shadow of a doubt, death had been caused by an irritant poison, which must almost necessarily, from surrounding circumstances, have been administered to her by some of the family, and which subsequently proved to be the case. Here the question of the exercise of sound and discreet judgment comes in as a factor in the issuance of a certificate; in a case of this nature, where such a viscus as the stomach, which, as a rule, is not the seat of idiopathic inflammations, suddenly takes on an acute inflammation, the cause of which is extremely uncertain to the attendant, and the case dies, although the law authorizes him to issue his certificate, the good judgment of the physician should prompt him to insist upon an investigation, not only as a protection to the community, but also to himself, for he is very likely to be held strictly accountable, if not criminally involved, if, as in the case above spoken of, it should afterwards eventuate that a criminal conspiracy and murder had been perpetrated, and nearly hidden by reason of the facility with which his certificate had been obtained. But under ordinary circumstances and diseases one is warranted in issuing a certificate after two or three days' illness, for it is not an infrequent occurrence for death to take place, in acute troubles, within this period.

One would not, however, be justified in issuing a certificate, even though he should know the man to have been the victim of a chronic trouble that must sooner or later necessarily kill him, when such patient has not been seen within a reasonable period; thus a case dying that had not been seen for two weeks, a month, three or six months, would not be a fit case for the issuance of a certificate; it would be decidedly a coroner's case, no matter how certain the physician was of entirely fair play having taken place. The law further holds that the doctor must exercise a reasonable degree of care in specifiying the party whose death his certificate is supposed to cover, his proper name, residence, etc.

These two facts may often, in after years, be of great importance in litigation, etc., that may arise, when those who were qualified to speak may have disappeared from the scene, and it may be necessary to identify a party and prove his death at a certain time and place; although it is not so particularly from this view that the law demands exactitude, as from the fact that a certificate certifying to the death of a person in one section of the city might, if this care were not taken, be made to do duty for a person of the same name in an entirely different portion of the city or country.

To sum up this whole question of jurisprudence, we may say that a case should be referred to the coroner whenever—First, death has taken place within twenty-four hours of the first visit of the physician. Secondly, whenever, no matter what period has elapsed since the first visit, death takes place under circumstances of even the slightest suspicion. Thirdly, when death takes place when a long interval has elapsed between the last visit and the one immediately preceding the person's death. Fourthly, when, in the good judgment of the physician, an investigation of the cause of death should be made previous to interment; this provision would cover those cases where the survivors are greatly interested in the death of the patient, and hope thereby to reap benefit.

Of course the law on this subject would permit of a much more extended discussion, but the space of a magazine article does not permit of such a thing. The main features, however, governing the profession, I think, are shown in this résumé of the matter.

Another interesting question in the field of medical jurisprudence, and one which, unfortunately, is largely overlooked, both in the books and general literature, is that of the increase of responsibility of physicians and surgeons in their treatment of cases, how far, when, and under

what circumstances they are liable in damages, and whether under like circumstances they are all equally liable. The courts hold that a surgeon or physician must possess such a degree of general knowledge as the advanced position of the medical profession demands, frequently only theoretically, that he should have. They further hold that he must excercise a due amount of care and attention in the treatment of his patient, and that his negligence, either in attendance or treatment, shall not be the cause of any after inconvenience to, or physical disability of, his patient; at the same time, the court would hold, in equity and justness, that the patient must contribute, so far as in him lies, to the assistance of the medical attendant, and to the observation of a due and faithful attendance and carrying out of the directions of the physician, and that he must not intentionally, in any way interfere with the means adopted for his relief, unless, of course, it be evident to any one that a wrong course is being pursued, that shall inevitably result in disaster if persisted in, though even then it is a question whether the proper course for the patient to take would not be to insist upon a consultation with some surgeon or physician of his own selection, for what at times may seem entirely wrong to the non-professional eye, may perhaps be a perfectly proper course to be pursued.

(*To be continued.*)

CORRESPONDENCE.

Case of Intussusception of the Bowels Relieved by the Injection of Cold Water.

ED. MED. AND SURG. REPORTER:—

The following case of invaginismus of the bowels, which occurred in my practice two years ago, I feel to be a duty to report to the profession through the columns of the REPORTER. Mrs. L., aged forty, residing six miles from the city, was taken, in the night of September 13th, with severe cramps in the bowels, accompanied with retching and vomiting. Doctor Heist, the family physician, was called in the morning to visit her. Not suspecting the true nature of the case he had to treat, he prescribed calomel and opium, etc., for the relief of his patient. Upon his next visit he found the patient no better, and vomiting stercoraceous matter, which at once convinced him that he had an obstruction of the bowels to deal with. The usual remedies in such cases were resorted to, together with frequent enema of different kinds, but all without affording the patient any relief. The retching and vomiting continued, preceded with severe pain in the bowels. The stomach would no longer retain anything administered, and hypodermic injections of morphine were resorted to, to render the patient as comfortable as possible.

On the fifth day after the attack two physicians from a neighboring town were called in consultation, who, after learning the nature of the case and the treatment of the attending physician, left without prescribing. The woman, having a good constitution and previous good health, continued to live, beyond all expectations. On the ninth day of her illness I was sent for in consultation. The doctor remarked, as I was an "old doctor," I might know something more than he had done, and if not, would satisfy the friends that his treatment had been proper. I found the patient rational and fully aware of her dangerous condition; she was very much prostrated; pulse 130, respirations frequent; the breath very offensive; the surface cool, with clammy sweat; and she as well as her physician convinced that she could not survive till morning if not relieved. Having, some six months previous, met with a case of strangulated hernia in a man, which I succeeded in reducing by the introduction of a large piece of ice into the rectum and the application of cold to the hernial tumor, I concluded to try the injection of cold water, as a last resort, hoping that thereby the obstruction might be overcome.

Having no ice at my command, I ordered cold water brought from the well. I laid the patient upon her right side, with the hips elevated and the body and head inclining downward. With a large-sized Mattson syringe, after introducing the long tube as far as I could, and having an assistant with a cloth applied to the anus to maintain pressure and prevent the return of the water, I pumped, with considerable force, about three pints into the bowels. The patient retained her position about ten minutes, the compress being maintained, when she expressed a desire to get upon the chamber; she was assisted up. The water passed away with a small quantity of fecal matter. She again resumed the same position, and in fifteen minutes had another passage of thin, watery excrement; in half an hour afterward she had another passage, of nearly natural fæces; she was then given some thin gruel, which the stomach retained. I left the patient in the care of her physician, feeling assured that all would end well.

The following day her husband came to the city and reported that after I left she took more nourishment, and the doctor gave her an opiate, upon which she rested well all night, and in the morning was cheerful and rapidly recovering. I have met in my practice several cases of intussusception of the bowels, all of which proved fatal, except this one. Should I meet with another case I would resort to the cold water injections with good hopes of success. A. GEIGER, M.D.

Dayton, O.

Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

Under the above heading we have had quite a number of articles lately to prove that the mental in the mother sometimes shapes the physical in the child. But it occurs to me the writers have taken effect for cause. I venture the assertion, that there is not an intelligent woman in the world who goes through the allotted period of gestation without having "impressions." They

have "longings" and many other both mental and physical peculiarities, yet no one thinks of placing these in the light of "cause." After having many impressions while waiting, and thinking, and planning, and dreading, it is scarcely possible to produce an abnormality or monstrosity to which none of these impressions will apply. The impression *never* (I believe I can safely say never) takes positive, definite shape, until the mother sees which one of her impressions is most nearly produced. Then all the others fade away, and the outlines of that which comes nearest are studied, and rehearsed, and mended, till the poor mother imagines, and the doctor helps her believe, that a mark was placed upon her unborn babe through the workings of her own disturbed, perverted and often really diseased mind.

Sometimes she will forget all about it, and blame the doctor for scarring her offspring with his instruments, until, at his suggestion, she searches for an "impression," and in a few days remembers that one day during those nine long months of waiting she rubbed her eye, and so deprived her child, in its unborn innocency, of both perfect vision and natural symmetry of form; or after admiring the red-headed brother-in-law's hair more than her husband's impressed *that* on her babe.

If the almost infinitely small sperm of the male zebra had a sufficiency to maintain itself throughout the period of the mare's gestation in the first instance, why may we not suppose the blood which was uninterruptedly mingling through the fœtal and maternal hearts retained sufficient of that which produced the stripes on the first to reproduce them on the second, though the second sperm was produced by one of the mare's own kind, and all the other parts were after that kind.

Bannerville, Pa. ISAAC R. SWIGART, M.D.

Incontinence of Urine.

ED. MED. AND SURG. REPORTER:—

On thinking over the subject of incontinence of urine, the following plan of treatment has suggested itself to my mind as likely to prove successful, especially in those cases in which this very annoying and obstinate complaint is the result of, or is kept up by, habit.

Attach one pole of an electric battery to a *moist* sponge, or metallic plate, fastened between the shoulders of the patient, and the other to a *dry* sponge placed over the meatus urinarius. When this has been done and arranged so as not to annoy the patient, let him be put to bed and the circuit of the battery completed. The sound of the battery will soon lull the patient to sleep. While the sponge is *dry*, no electricity passes through the body of the patient and his slumber is undisturbed, but the moment the patient begins to urinate the sponge is moistened, it becomes a conductor of electricity, a circuit is completed through the body of the patient, and he or she is at once aroused, awakened, caught in the very act, and thus a caveat is entered by the will of the patient, as well as by the electricity, against further proceedings, at least for this time. A repetition of a like experience for a sufficient number of times ought, I am inclined to think, to cure the patient; but since this suggestion has occurred to me I have not had an opportunity of putting it to the test of practical experiment, and submit it to the consideration of the profession for what it is worth.

H. NYE, M.D.

Enon Valley, Pa., September 11th, 1881.

Periodic Headache, Due to Nocturnal Epilepsy.

ED. MED. AND SURG. REPORTER:—

I enclose notes of the following case:—

J. B., æt. thirty, height five feet six inches; a well-made man; dark complexioned, slightly inclined to corpulence. His wife informed me that every Monday he awoke with a headache, so severe as to incapacitate him from attending to his business. The headache never came except on Monday. It wore off in the course of the day, and was gone by Tuesday morning. There was no malaria prevalent at that time and place to account for these distinctly periodic attacks. On further inquiry, I found that he invariably had the "nightmare" on Sunday nights; the spells beginning with a cry, and not lasting over five minutes. No scars were to be found upon his tongue. His eyes had that peculiar look frequently seen in epileptics, though by no means confined exclusively to them. The diagnosis of nocturnal epilepsy was subsequently confirmed in a singular manner. For some urethral difficulty, I attempted to introduce the nozzle of a syringe; but no sooner did the instrument touch the meatus than he went into an epileptic fit; beginning with a scream, in the course of which both bowels and bladder were evacuated.

Thinking there might be some reason for the fits appearing only on Sunday nights, I inquired as to what peculiarity there was in his habits of the previous day. He informed me that he ate over a quarter of a pound of Swiss cheese every Sunday evening, generally about 11 P.M.

Abstinence from this article, regulation of his habits in some other respects, and the use of bromide potassium in forty-grain doses, three to six times daily, were followed by a rapid cure, which has now endured for more than a year.

WM. F. WAUGH, M.D.

878 *North Sixth street, Philadelphia.*

Enlarged Spleen.

ED. MED. AND SURG. REPORTER:—

In your valuable journal, recently, I have noticed several articles on treatment of enlarged spleen. Large practice in a district where all forms of malarial diseases are met with necessarily affords a vast field for observation, as enlargement of the spleen is a usual concomitant of chronic intermittents. A few weeks since I was called upon to prescribe for a case of greatly hypertrophied spleen of over a year's standing; so tender that the ordinary movements of the body sometimes caused excruciating pain. Ordered hydrarg. iodid., rubri ung., one drachm, to be rubbed over the region of the spleen every other

night. Through mistake it was rubbed over the whole side. A few days after it was reduced in size to almost normal, all soreness had disappeared. I have treated a great many cases of chronic enlargement of the spleen, and have never found it necessary to use any other remedy, as the results attending its use have been eminently satisfactory in my hands as well as in the hands of others, to whom I have recommended it.

H. K. Hiller, M.D.

Hookerville, Texas.

News and Miscellany.

The Autopsy of the Late President Garfield.

The following is the official report of the autopsy of the late President:—

Elberon, Sept. 20th, 1881.

By previous arrangement a post-mortem examination of the body of President Garfield was made this afternoon, in the presence and with the assistance of Drs. Hamilton, Agnew, Bliss, Barnes, Woodward, Reyburn, Andrew H. Smith, of Elberon, and Acting Assistant Surgeon D. S. Lamb, of the Army Medical Museum, Washington. The operation was performed by Dr. Lamb. It was found that the ball, after fracturing the right eleventh rib, had passed through the spinal column, in front of the spinal canal, fracturing the body of the first lumbar vertebra, driving a number of small fragments of bone into the adjacent soft parts, and lodging below the pancreas, about two inches and a half to the left of the spine and behind the peritoneum, where it had become completely encysted. The immediate cause of death was secondary hemorrhage from one of the mesenteric arteries adjoining the track of the ball, the blood rupturing the peritoneum, and nearly a pint escaping into the abdominal cavity. This hemorrhage is believed to have been the cause of the severe pain in the lower part of the chest complained of just before death. An abscess cavity, six inches by four in dimensions, was found in the vicinity of the gall bladder, between the liver and the transverse colon, which were strongly adherent. It did not involve the substance of the liver, and no communication was found between it and the wound. A long suppurating channel extended from the external wound, between the loin muscles and the right kidney, almost to the right groin. This channel, now known to be due to the burrowing of pus from the wound, was supposed during life to have been the track of the ball. On an examination of the organs of the chest evidences of severe bronchitis were found on both sides, with broncho-pneumonia of the lower portions of the right lung, and, though to a much less extent, of the left. The lungs contained no abscesses and the heart no clots. The liver was enlarged and fatty, but free from abscesses, nor were any found in any other organ except the left kidney, which contained, near its surface, a small abscess about one-third of an inch in diameter.

In reviewing the history of the case in connection with the autopsy, it is quite evident that the different suppurating surfaces, and especially the fractured spongy tissue of the vertebra, furnish a sufficient explanation of the septic condition which existed.

D. W. Bliss,
J. K. Barnes,
J. K. Woodward,
Robert Reyburn,
Frank H. Hamilton,
D. Hayes Agnew,
Andrew H. Smith,
D. S. Lamb.

Statistics of Female Physicians.

The Health Department of the Social Science Association, met in Saratoga, Sept. 6th, Dr. Walter Channing, of Boston, in the chair. Drs. Emily Pope and Mary Putnam Jacobi, were among the newly elected members.

Dr. Emily Pope read a paper on "The Practice of Medicine by Women in the United States." The objects were to show to what extent women were practicing medicine in this country; whether the majority of women graduates in medicine devote themselves to its practice; how far their pecuniary success shows a demand on the part of the public for educating women physicians; what effect the strain of practice has upon their health; what proportion of them marry, and with what results to their professional career.

The 470 circulars sent out to women physicians have brought statistics showing that 390 are engaged in active practice; 11 never practice; 29 have retired after practicing, 12 of whom after marriage; 7 retired from ill health, and 5 have taken up other work. These women are in 26 States, New York, Massachusetts and Pennsylvania having the largest proportion. Of those heard from, 75 per cent. were single when they began the study; 19 per cent. were married, and 6 per cent. widows. Average age when they began the study, 27 years; 144 practiced less than 6 years; 123 between 5 and 10 years; 40 from 10 to 15 years; 15 from 15 to 20 years; 23 over 20 years; 341 practiced regular medicine; 13 homœopathy; 10 gave no answer; 77 report that they supported themselves from the beginning of their practice; 34 in less than one year; 57 after the first year; 34 in two years; 14 in three years; 10 in various periods over three years; 138 say their incomes are still insufficient or make no reply; 12 never practiced; 20 are in hospital practice; 30 are not dependent on professional income; only 11 are left who can fairly be said to have practiced over two years without supporting themselves.

On the Diagnosis and Treatment of Guiteau's Insanity.

The editor of the *Arkansaw Doctor*, in a recent editorial on the mental condition of Guiteau, expresses himself as follows:—

The affection is one of nervous origin, and although the principal functional lesion is in the great nervous centre, the brain, yet like all nervous diseases it may have an anatomical lesion, remote from the functional, and the symptoms, (the aberration) are perhaps only reflex.

The history of the patient under consideration is such as to lead one to suppose that the primary lesion is situated in or upon the cervical portion

of the spinal cord, the history of Guiteau being that he had a tendency to put himself forward, or in other words that he had a mania for seeking a position inconsistent with his general qualifications. This, in country parlance, is known as "stiff neck," hence our location of the lesion in the cervical portion of the spinal cord.

Now, since nerve stretching has attained such popularity and recognition from eminent neurologists all over the world, we would modestly suggest a trial of this operation in Guiteau's case; although our knowledge of the operation is altogether theoretical, we would suggest the stretching of the cervical portion of the spinal cord, say about two inches. This, in our opinion, would produce an equilibrium in the nervous system.

This is not, as some might naturally suppose, a dangerous operation; we remember to have seen it performed on several occasions, by operators no better skilled in surgical science than the average sheriff, and we cannot recall a single failure.

More About Birth Marks.

The *Ohio Medical Journal* has the following good story, as told of a physician of Dayton, Ohio: The doctor was recently attending a case of labor in the family of one of his patrons, who, though a very excellent man, is a little slow in the payment of his medical bills. Immediately after the birth of the baby, the father nervously asked, "Doctor, is the baby marked?" "Yes," quietly replied the doctor, "It is marked 'C.O.D.'"

It is needless to add that the bill for that baby was promptly settled.

Prize Essay.

The committee of selection appointed by the chairman of the Section on Practical Medicine, Materia Medica and Physiology, at the recent meeting of the American Medical Association, have selected, and hereby announce, as the subject for the prize to be awarded in 1883, the following question:—

What are the special modes of action, or therapeutic effects upon the human system, of water, quinia, and salicylic acid, when used as antipyretics in the treatment of disease? The essays must be founded on original experimental and clinical observations, and must be presented to the chairman of the committee of *award* on or before the first day of January, 1883.

N. S. Davis,
H. D. Holton,
W. B. Ulrich,
} *Com. of Selection.*

Florida Medical Association.

At a called meeting of the Florida Medical Association, at Tallahassee, January 13th, 1881, the following officers were elected: Dr. G. W. Betton, Tallahassee, President; Dr. A. J. Wakefield, Jacksonville, 1st Vice President; Dr. J. M. Jackson, Bronson, 2d Vice President; Dr. A. L. Randolph, Tallahassee, Secretary; Dr. J. D. Fernandez, Jacksonville, Treasurer; Dr. A. W. Knight, Jacksonville, Librarian; Dr. R. B. S. Hargis, Pensacola, Orator. The association will meet in annual session, on the third Tuesday in April, 1882, at Pensacola. According to an act of the last Legislature of Florida, 1880–81. every city and town in the State having over three hundred inhabitants should have a Board of Health, consisting of seven members, one, at least, of whom should be a physician.

The Origin of Goitre.

The Geographical Distribution of Goitre in England has been studied by Professor Lebour. One important point only he considers to be established as common to those rocks on which goitre does not occur—the absence of limestone, together with that of metallic impurities. In this respect his results agree with those of Dr. de St. Lager, of Lyons, who has investigated the occurrence of the disease in France. In both countries the rocks on which goitre occurs most frequently are both calcareous and metalliferous. Metalliferous impurities alone cannot be credited with the origin of the disease, or the Devonian and the granite would not be free from it. And the absence of chalk does not check the disease, or the ferruginous sands of the Weald would not support it.

Leprosy in China.

Leprosy exists among the Chinese to a greater extent than is generally supposed. It is one of the most dreaded of diseases in China. There is a current belief there, that if a person afflicted with it can kill a young girl and eat her heart, the evidences of the disease will not appear in the face, and that he can thus escape being known as a leper. This notion has probably been the cause of many murders. The leper's demand for alms is seldom refused, most Chinamen dreading the victim of this loathsome affection, and fearing that, if denied assistance, he may in some way infect them with his leprosy, as, for instance, by tainting their food.

Personal.

—Dr. R. B. S. Hargis has been appointed chairman of the Board of Health of Pensacola, Fla.

—There are thirty-nine doctors in the new French Chamber, and all of them but one are Republicans.

—The Board of Managers of the Presbyterian Hospital has unanimously elected Dr. H. Augustus Wilson as Pathologist of that institution, vice Dr. D. F. Willow, who was elected Surgeon to fill the vacancy caused by the death of the late H. Lenox Hodge, M.D.

—Mr. William MacCormac has received the honor of knighthood, in consideration of his services as honorary Secretary-general of the International Medical Congress. He was born in 1836. He is the son of an eminent physician, Dr. Henry MacCormac, of Belfast. Mr. MacCormac was a student in the Queen's University, Ireland,

and was elected surgeon to the Royal Hospital, Belfast, in 1864. In 1870, on the outbreak of the Franco-German war, Mr. MacCormac immediately volunteered his services, and was nominated by the French Minister of War, for duty in one of the hospitals of Metz. He was afterward appointed surgeon-in-chief of the Anglo American Ambulance, which, under his direction, both during the battle of Sedan and subsequently, was able to render signal services to the wounded of both nations. He embodied the results of his war experience in an interesting volume, entitled "Recollections of an Ambulance Surgeon," which was translated into German, French and Italian. On returning to England, Mr. MacCormac was elected to the Fellowship of the Royal College of Surgeons of England, and shortly afterwards, surgeon and lecturer on surgery to St Thomas's Hospital.

Items.

—A case of bulging brow: "What a fine, protuberant forehead your baby has, Mrs. Jones! Did he get it from his father?" "No," replied Mrs. Jones, "he got it from a fall down stairs." —*Boston Transcript.*

—A frightful epidemic of typhoid fever is now raging at Athens. Ten thousand persons, or a tenth of the whole population, have been attacked by it, and those who can, are flying from the city. The probable explanation of the outbreak is, some pollution of the Athens water, which is at all times of bad quality.

—"Just keep your bottle of whisky in your closet, and when the girl brings you your hot shaving water in the morning, you can mix your toddy quickly and not a soul will know a thing about it," said the M. D. The plan worked well until the old man's daughter thought he must be going insane, because he wanted to shave five or six times every day.—*Boston Transcript.*

—At the annual meeting of the Homœopathic Medical Society of the State of New York, held last month, Dr. H. M. Paine, of Albany, read a paper relating to the new law providing for the registration of plumbers and the legal supervision of all plumbing work in the cities of New York and Brooklyn. The law provides for the registration of all parties engaged in the business of plumbing. A violation of its provisions is made a misdemeanor. It requires all plumbing and draining work to be constructed in accordance with plans to be approved by the Boards of Health of these two cities respectively. By this means only can there be secured the requisite thoroughness, efficiency and uniformity of construction; hence the necessity and usefulness of the law.

—Tact is as necessary as knowledge to a successful practitioner. It is well known that Lord Eldon, when plain John Scott, eloped with the lady whom he married, and that they were lovers all their lives. While it was yet very early with them, young Mrs. Scott fell ill in a strange village, and the local practitioner was sent for. Having, after the usual routine, failed to make out what was the matter with this beautiful lady, he said: "I'm afraid, ma'am, there is something on your mind? You are not happy with your husband?" This was bad practice. Mrs. Scott had much spirit and natural eloquence, and there was nothing the matter with Mr. Scott, who was both tall and athletic; but the muse will not sing the dismissal of that doctor.—*London Spectator.*

QUERIES AND REPLIES.

Eczema.

If Dr. B. B. G., of Tenn., will try Muriate of Ammonia Pulvis for Eczema, five to ten grains in a wine-glass of water internally after each meal, and thirty to forty grains of the same dissolved in one-half pint of water externally to parts affected by bandage, saturated with the solution or frequent application without bandage, he will be content after the first week to persevere. In my experience three to six weeks' time has been required to effect a cure. R. O. CRANDALL, M.D.

Dr. J. B. R. P., of Del.—The laws regulating the practice of medicine in the city of Philadelphia may be obtained at the office of the Board of Health, 600 Sansom street.

Dr. W. H. J., of Pa.—We know nothing of the preparation "Selerina," to which you refer, and have on general principles great distrust of the efficacy of any secret remedy.

Dr. T. G. E., of W. Va., asks:—What is the best vehicle for preserving nitrate of silver in solution for an indefinite time? Water throws down a precipitate after standing a certain time."

Dr. J. W. C., of Ala.—Reports the appearance of a large, fluctuating, pulsating, but painless tumor, commencing near the mastoid process and extending under the ear, on a child eleven months old, and asks a diagnosis. It is impossible to do more than guess at the nature of such a tumor, without personal examination. We would not venture a positive answer to such inquiries.

Experimenter, of Pa.—The International Congress of Electricians began in Paris, September 15th. We have seen no list of American Delegates.

Victor, of N. Y.—It is quite possible that the native Indians know an "infallible antidote" to the rattlesnake bite. But if they do, they have kept the secret well.

MARRIAGES.

MECKLEM—PARRY.—By the Rev. C. S. Ernsberger, Saturday evening, September 10th, 1881, at the residence of the bride's parents, W. S. Mecklem, M.D., and Alice C. Parry, all of Lucas, Ohio.

KLINK.—SCHMIEDT.—On September 14th, 1881, by the Rev. S. C. Breyfogel, Frederick Klinck, M.D., to Miss Minnie Schmiedt, all of this city.

FARNHAM—HUSSEY.—In Skowhegan, Maine, August 14th, by the Rev. O. J. Hancock, A. E. Farnham, M.D., and Miss Jennie K. Hussey, both of East Madison, Me.

DEATHS.

WILLS.—Died in Cecil Co., Md., August 9th, Anne Cox, aged one month; and on the 28th of the same month Zebulon Porter, aged two months and twenty days, infant children of Z. P. and Mary E. Lusby, and grandchildren of Dr. S. E. Wills.

THE

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Original Department.

Lecture.

LACERATION OF THE CERVIX UTERI.

A Clinical Lecture delivered at the Hospital of the University of Pennsylvania, Sept. 14, 1881,

BY WILLIAM GOODELL, M.D.,

Professor of Clinical Gynæcology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Gentlemen:—I am glad to meet you again; I am glad to see you all looking so well.

The first operation that I shall show is one which I hope you will all be able to perform after you graduate. It is an operation for laceration of the cervix.

This woman is a widow; she has had several children; I do not remember how many, but one of the labors was tedious, and the forceps were used to facilitate delivery. Of course, it does not necessarily follow that because instruments are used there will be a laceration. I once produced a laceration myself, while using the forceps. It was in this way: The patient was threatened with convulsions, during labor, which necessitated speedy delivery. The head was high up inside of the cervix; I applied the forceps very carefully, and pulled with the greatest slowness, but I tore the mouth of the womb. In a great many of the bad cases that we have had at the hospital, we have found that instruments were used in delivery. I do not know whether the physician is to be blamed or not, but I do think that the forceps are put on more frequently for the sake of the physician than for the sake of the woman, and it is possible that the head is drawn through more rapidly than it should be. The most frequent cause of laceration is, I think, too early rupture of the bag of waters. There is no doubt but that, in a multipara, rupture of the membranes will hurry labor through. The temptation to rupture the membranes is, therefore, very strong, and a frequent result is laceration of the cervix. I believe that this is the history in the great majority of cases. I think that that physician will act best, other things being equal, who does not rupture the membranes until the os is dilated. I think that is a good rule.

We now place the woman in Sims' position, *i.e.* on the left side, with the left arm behind the back and the knees drawn up. In this position there is a tendency for the abdomen to sag down, and when Sims' speculum is passed into the vagina the air rushes in, distending the vagina. We increase this tendency to sagging of the abdomen by raising one side of the table by means of this lever, thus inclining its top. I have spoken so often in regard to the recognition of this trouble, that I shall not allude to it to-day, except to say that there is no disease of the uterus in which so many mistakes are made. It is mistaken, in the vast majority of cases, for an ulceration. The physician introduces a speculum, looks in and sees the red surfaces of the everted lips of the cervix, and immediately imagines that he has to deal with an ulceration. It is just the same as if the lids of my eye were rolled outward. The atmosphere and particles of dust would irritate them and make them red, not raw, but red. So it is with the mouth of the womb. There is eversion, and we call it an ectropion of the mucous lining of the cervical canal.

I there show you the red surfaces that look like an ulceration, but if I take two tenaculi and

catch each lip, I shall be able to restore the lips which have been torn, and at once the seeming ulceration disappears. You now see nothing but a fissure. Sometimes you can detect this fissure with the fingers when making an examination, but very often, in cases of old laceration, there is a flattened surface presented to the finger.

I shall now proceed to perform the operation. I introduce a tenaculum on each side, and cause the raw surfaces to disappear. While the lips are held in apposition, I take a needle, armed with a No. 2 silver wire, and pass it through both lips of the cervix. I then twist the ends, and with a tenaculum, draw out that portion of the wire between the lips. I thus have the cervix under perfect control, and can make my incision with mathematical accuracy. This point was gradually worked out. There is nothing abrupt in nature. No motion is abrupt, and no improvement is abrupt. It was years before it struck me that I could, in this way, secure perfect apposition of the lips during the operation.

I now ask one doctor to hold one side and another doctor to hold the other side, while I denude the surfaces. I used to denude very much with the scissors, but I now prefer the knife. I commence to denude the lowest part, for if I commence at the upper part the flow of blood would interfere when I came to denude the lower portion.

This woman has had a great deal of local treatment, and has been no better for it. She is quite nervous and hysterical. She has backache very constantly. She is a widow and dependent upon her own exertions.

I have been able to draw the womb down unusually low in this case, and this makes the operation much easier. It is not right to make very powerful traction as inflammation, pelvic cellulitis, might be caused.

My experience has been this: In private practice I have never had any inflammation follow this operation. This is my one hundred and thirteenth operation, and I have had inflammation follow in only two, both of whom were in the hospital. One of the cases I attribute to the fact that a surgical patient in the bed next my patient had erysipelas, and, I have no doubt, poisoned my patient. She had a pretty severe attack of peritonitis, followed by an abscess in the leg—a phlebitis. The other case also had a pretty smart attack of peritonitis; but neither of them died.

I never operate under the spray, because it obscures the vision, but I always use a solution of carbolic acid on the parts, about a 2½ per cent. solution.

You see that I try to remove all the cicatricial tissue. I now put the lips together to see how near right I am, and I find that I have it very near right. I have taken a wedge shaped piece of cicatricial tissue from the angle. The knife creaks as it passes through. You can see there dense cicatricial tissue. It looks like a potato that has been cut by a rusty knife.

Often, in denuding these surfaces, you will come across little glands about the size of large shot. These are filled with a gelatinous fluid. They are the glands of Naboth, which have been thrown out by the eversion of the mucous lining. In performing this operation we have one comfort. We know that we can always stop the hemorrhage by the introduction of a stitch.

Let us now see what is the result. You see that I have increased the laceration. I have cut away wedges of cicatricial tissue from each angle, and have denuded the surfaces.

In all plastic operations we have to be extremely careful to have the parts perfectly denuded, and everything right. I therefore examine the parts carefully before going further. I am now ready to pass the stitches. I like to always pass the more difficult stitches first. Those in the lower side are the hardest to pass. I shall, therefore, introduce them first. I have never been able to find a needle holder strong enough to hold the needle firmly. Even this strong Russian needle holder will let the needle slip. I have been compelled to have one of extra strength constructed. I use fine wire for the stitches. If the cervix is small and supple, I use No. 1 wire. If I am afraid of strain I use a little heavier wire. Other things being equal the finer the wire the less likely is it to cut out. After I pass each stitch I bring the ends together and slip a shot over them.

You see the advantage of this directing wire, which enables me to hold the parts in perfect apposition while passing the stitches. It is not necessary that you should use shot in this operation, at least, some excellent operators simply twist the wire. The shot acts as little shields, little adjusters, keeping the parts from eversion, and also from inversion. I have no reason to find fault with them. I can estimate the amount of pressure that I am putting on the part by the direct pressure downward with my finger. In all these plastic operations for laceration of the perineum, laceration of the cervix and vesico-vaginal fistula, I prefer shot.

You see how far down I can draw the womb. It has been objected to drawing the womb down, on the ground that you might have inflammation

produced. My experience does not agree with this. The womb is intended to be movable. This movement is necessary in sexual intercourse. If it were not so, great injury would result.

I am now ready to run down and clamp the shot, first on the lower side, the difficult one, and then on the upper, to insure success, and this is one of the most successful operations. The rule that I adopt in all operations of a plastic character, is to inject, before securing each wire, a stream of 2½ per cent. solution of carbolic acid on the part, to remove all clots, foreign matter and any septic matter that may be present. Dr. Boer will now inject a stream of the water, while I hold the wound open with the long forceps. The union in this operation is usually very good.

A week ago to day, I operated on a case of vesico-vaginal fistula. It was a large one, but I was able to denude it so well, and was able to remove every clot, and although I put in eleven stitches, I feel confident that when I remove them I shall find perfect union. I believe that there will be perfect union in this case.

Do we ever have secondary hemorrhage after this operation? In some books you will see secondary hemorrhage alluded to. I have had it occur in but one of my one hundred and thirteen cases. That happened in this building. It was not at all alarming. Occasionally, after passing in all my stitches, I have found a point where bleeding occurs. I have then simply passed a stitch behind it and stopped the bleeding.

Suppose perfect apposition has not been attained, and secondary hemorrhage occur. What will you do? I should advise you not to tampon the vagina if you can possibly avoid it, because the accumulation of blood would interfere with the success of the operation. I should inject hot water. If this did not stop the bleeding, I should be tempted to use a hot solution of alum. A strong solution of alum can be made with hot water. This has the advantage of not interfering with union by the first intention, as Monsell's solution would. If union occurs by the second intention, there is a certain amount of cicatricial tissue formed; but the fact is, that if you do not get union by the first intention, you are not apt to get it by the second.

Gentlemen, here is another little dodge about this operation. Here is a stitch away up here in the right hand corner; how am I going to get at that when I remove the stitches? We do not give ether when we take out the wires, and I have found that when a woman has had ether once, she does not want it again. I remove the stitches with my ordinary bivalve speculum. It is not a painful operation if you have everything ready. Here is this stitch high up on the right side. I am not going to cut that wire off short, but I shall put a shot on the end of it, to prevent its sticking the vagina, and leave it. Now, when I introduce my speculum I shall have no trouble in finding the stitch. You will find this a great convenience. I shall also leave this one on the left side. I often leave this central wire, which has been my guiding wire. I shall do so in this instance. I shall slip a shot down and it will afford some support. Of course, it would not be proper to do this if there were any danger of her menses coming on.

The proper time to perform this operation is two or three days after menstruation. There will then be no danger of bringing on the menses. If you operate at the middle of the month, menstruation will often anticipate. It occasionally happens, however, that we have to operate when we can get the patient. Last Friday I operated on a patient who expects her monthlies early this week, so, of course, I did not leave this central wire. In this instance I have temporarily closed the cervix.

In order to remove the stitches you introduce the speculum and bring down the three long wires, then cut off the short stitches and remove them, leaving the long wires until the last.

Before this woman is put to bed, I must count the stitches, so that I shall know how many to remove. I have repeatedly overlooked some of the stitches. I performed this operation in the country and removed the stitches before I started on my trip to Europe. The day after my return this woman came into my office. I had left one stitch; I think her husband had discovered it and complained about it. (I don't say that to make you laugh, but because it is true, it is so.) If it had not interfered with the marital relations it would have given that woman no more inconvenience than an earring in her ear.

Here is another point. The man who performs an operation the neatest, not only feels better, but he also conveys the impression of having done the operation well. You see that as the woman lies in this position, the blood could flow from the front of the vagina, between her legs, and soil her clothing. Take a folded napkin, place it between the thighs and the clothing is kept dry and clean. This is a little point, but it secures great comfort for the patient.

She will be kept in bed, her water drawn, and enough opium given to keep the bowels quiet. As far as pain is concerned, it is *nil.* The patient usually suffers no more than from an ordinary monthly.

Communications.

THOUGHTS ON THE HYGIENE OF INFANTS AND YOUNG CHILDREN.

BY THEO. H. BOYSEN, M D.,
Of Egg Harbor City, N. J.

The preventable deaths in infancy and childhood chiefly arise from —

1st. The acute infectious diseases, smallpox, scarlet fever, diphtheria, whooping cough, measles, etc.

2d. Inflammatory diseases caused by indiscretions in food, clothing, etc.

3d. Hereditary affections.

The first named class of preventable diseases causes, annually, from eighteen to twenty-six per cent. of all the deaths up to five years of age. These affections are all transmissible by contagion or infection, and are preventable to that degree to which we are able to prevent the communication of healthy persons with those suffering from any of the affections named.

The measures which should be resorted to for the prevention of excessive fatality from the second and third class of diseases can be stated in a few words: proper food, proper clothing and proper exercise.

When an infant is ushered into the world the expectant family receives it with open arms. The physician or midwife having carefully tied the cord and severed the connection with the placenta, the little stranger is handed to the nurse, wrapped in a cloth, and held by her or some one else until the bath is ready; the latter is made warm and comfortable, so that the little visitor may not catch cold, then the child is immersed and subjected to a thorough cleansing, after which it is taken out, held near a hot stove, if the weather is cold, and carefully dried off and dressed.

This is the procedure which, with very slight variations, is performed at every confinement.

But is this procedure conducive to the health of the child? Let us consider for a moment.

The child has just been released from the uterine cavity; here it was immersed in a fluid whose temperature was not less than ninety-nine degrees Fahrenheit The temperature of the room is perhaps somewhere between 60 and 70, that of the child is also about 99. As a consequence the moisture on its body evaporates quite rapidly, and in so doing, of course, reduces its bodily heat. Then the child is again immersed in warm water, which, as we all know, has a decided tendency to reduce the body temperature still lower. Who, with any experience, does not know that these little sufferers almost always shiver with the cold, have blue, cold and shriveled hands and feet, blue lips and cold skin, when taken from the bath?

I believe no one can contradict me when I state that this condition of affairs is not beneficial for the life and well being of the child.

I will venture to state that hundreds of children die annually simply because they are unable to withstand this cold reception in a, to them at least, severely cold world.

Severed from its mother, it is bereft of the warm preserving medium in which it has hitherto existed; the heat of the blood is no longer preserved by its circulation through the placenta. This alone is a severe enough test for the vitality of the child, but to be, in addition, placed in a temperature-reducing bath, is not this cruelty? Happily we have a method by which this can be obviated.

Dr. J. W. Cragin recommends that the body be anointed with lard or oil, and I can, from experience, heartily endorse all that he says. These are his words: "The amniotic liquor is soon evaporated from the surface, and about the time reaction occurs the garrulous nurse takes it on her lap and at once exposes its nude, moist body to the atmosphere, in a room whose temperature is somewhere from 70° to 60°, or even less. There is a sudden reduction of temperature, to this tender infant, of 39°, or more. Then with her dish of warm water, pot of grease, soap and towel, she leisurely begins the process of inunction, soaping, washing, rubbing, inspecting, wiping, eulogizing and comparing. She views this exposure as a matter of utter indifference, yea, even a necessity, for the grease and *dirt* must be washed off, and she must have time and opportunity to do it properly.

"Now is it not probable that this exposure to cold, and chilling of the body is the initial or starting point, the foundation and cause of that train of numerous evils and ills which lead to such fearful mortality? Is it not more than probable that serious injury to, or structural changes of, the delicate molecules and tissues are produced, which lead to diseases present and remote?

"After ligating the cord, a coating of fresh, soft lard is quickly applied to the whole surface of the child, excepting its face, which latter is to

be wiped off with a damp cloth. A napkin is applied about the hips, and it is quickly slipped into a loose flannel gown, enveloped in a proper blanket, and laid in some comfortable place." In twenty four or thirty-six hours the infant has become accustomed to the great change in temperature it has been subjected to. The nurse can then give it its first ablution. Upon removing the gown, she will find its skin perfectly clean of the vernix caseosa, smooth, soft and velvety. After quickly bathing and drying, it is to be re-clothed in napkin and gown, as at first."

Treated in this manner the infant retains the animal heat which it would otherwise have lost, and is assisted in the first and most dangerous stages of its existence.

The clothing of children should at first be of such a nature that they may retain the bodily warmth as much as possible. In other words, poor conductors of heat, woolen goods, loosely woven, are best. The body should be nowhere constricted, so that the circulation may not be impeded. For this reason the usual umbilical bandages as applied are rather an injury than a benefit.

As the child grows in strength and age the clothing should be gradually made lighter. On no account should the mother be allowed to muffle it up in many wraps; these do not make the child warmer, but only render the breathing more difficult. Gradually accustom the child to extremes of temperature. In other words, harden the cutaneous surface by a careful regulation of the clothing, so that it may be better able to withstand the effects of any sudden change of temperature. I believe that more children are killed, or at least made sickly, by too much care and clothing than by too little.

Let them run barefooted in summer, if there is no danger of injuring their feet, but keep the latter warm in winter. Do not allow them to wear rubbers, because they render the feet very susceptible to cold and wet. Never allow them to wear mufflers about their throats, except in cases of extreme cold.

Let it be understood, however, that I do not advocate an extreme neglect of warm clothing; but it seems to me that if all children were subjected to a judicious degree of hardening we would have less pneumonia and bronchitis, and as a result, less phthisis to contend with, and the number of premature deaths would be correspondingly reduced.

After the newborn infant has been washed, scrubbed, rubbed and dressed, the nurse next turns her attention to stilling its hunger: she asks, Doctor, what shall I give it? I answer, that new-born infants need no nourishment other than the mother is able to provide. The colostrum acts as a purge to relieve the bowels, and all the nasty nostrums that are usually given cannot be of any benefit, but are usually exactly the contrary. Nature has provided for the infant a food which contains, when in a normal condition, all that is required to give strength and vigor to it. The mother's milk is all that is required by nine out of every ten children, and I think we should emphatically forbid a healthy mother to feed her offspring with prepared infants' food, or that worst of all abominations, pap and arrowroot, or corn starch. If, however, an infant is unfortunate enough to lose its mother, or if from some cause the mother has not sufficient nourishment, or if the latter is of inferior quality, then it becomes necessary for us to provide some food which will supplant as completely as possible the missing mother's milk.

The most natural substitute, of course, would be a wet nurse, and where a good nurse can be obtained such a one is to be recommended, but in many cases, and I may say, most cases, various causes combined make it an impossibility to obtain a wet nurse, and we are forced to look to some other source for the nourishment of the infant. The food which approaches nearest in its constituents and composition to that of human milk, and which is most easily obtained, is cow's milk, and in the country, or where good, pure and *fresh* milk can be obtained nothing better could be found, if properly prepared.

An essay by Dr. Wegscheider, of Berlin, based on the microscopical and chemical examination of the fæces of a number of healthy infants between two and three months old, whose diet consisted entirely of breast milk, reveals some interesting facts with regard to the various changes which go on in the digestive tract at that early period of life.

The most important conclusions which Dr. Wegscheider draws from his researches are the following: "1st. The albuminous constituents of the milk are completely absorbed; 2d, the white residue which is found in the fæces and is usually regarded as casein, is *not* casein, but chiefly fat, with some admixture of intestinal epithelium; 3d, the unabsorbed fats leave the bowels partly as soap, partly as free fatty acids, and perhaps partly as unaltered fat; 4th, urobilin and unaltered bilirubin occur in the fæces, and biliverdin is also found in diarrhœal stools.

"It is clear, therefore, from these products expelled, that all the casein is absorbed, also

nearly all the sugar; and, third, a large proportion of the fats. These, therefore, are essentially the ingredients required in any healthy food for infants."

The subject of infant feeding offers a very wide field for discussion, but owing to the limited time at my disposal I can here offer only a few rambling remarks, giving my own opinions on the subject.

Human milk produces an alkaline reaction, while cow's milk is very often acid; therefore, it is advisable to add some alkali. I usually employ small quantities of soda bicarbonate for this purpose. Lime water is also very useful.

Sugar is present in larger proportion in human milk, and when cow's milk is used it should be sweetened somewhat. Cane sugar is preferable to milk sugar, because the latter is very rapidly converted into lactic acid, while the formation of acetic acid from the former takes place more slowly.

Milk should always be boiled immediately upon its receipt, in order to destroy any ferments which may be already present, and if then diluted and sweetened it is proper for use.

It should always be given at stated intervals and should be as near the temperature of fresh milk as possible.

Sometimes, however, especially in hot weather, diarrhœa sets in, no matter what amount of care is taken with the milk, the nursing bottles, etc., etc., and it is then necessary to resort to something else.

In these cases I have found albumen in the form of the white of eggs very beneficial.

In regard to prepared foods I will only say a few words. There may be one or the other of these that is worthy of the name, but in the absence of a definite knowledge of their exact composition I cannot but condemn them. Most prepared foods contain starch, and it being a well known fact that infants do not digest starch, therefore they are, as a rule, inadvisable.

After dentition the digestive power of infants changes entirely; while before, starch, when introduced into the stomach, remained unchanged, it is now converted into sugar, and is absorbed; therefore, as soon as dentition has reached a certain stage (molars) other than milk diet may be allowed. The change should, however, be very gradual and milk should be one of the mainstays until long after dentition is completed.

I have found patent barley and oatmeal an excellent food when given with milk and water, during and after dentition. Barley gruel should be given if the child is habitually loose in the bowels and oatmeal gruel if constipation exists.

All infant foods should be given in a liquid form and from a nursing bottle.

Children should not be allowed to eat at the table with grown persons until dentition is completed, and as a very important adjunct to proper feeding I think their moral training should be carefully looked after. Willfulness and disobedience are often the causes of serious illness.

The physical training of children should not be neglected; they should not always be kept in their rooms, and possibly even in prim. nice clothes, which they dare not soil. They should be allowed to exercise their lungs, legs, arms and bodies, to romp and tumble about and enjoy themselves.

Gradually and imperceptibly they should be taught to exercise their mental functions, and the admission to school should not be their first experience in this direction. Before and after school hours and during the recesses they should be allowed to make as much noise as possible, but, of course, accidents should be guarded against, by not allowing games and plays that are dangerous.

With this I must close my remarks on this subject, and although I have said nothing new and startling, my object will have been attained if I succeed in drawing attention to a subject of the gravest importance, and one which I think the medical profession is in a position to enlighten the general public about, to a very great extent.

COCCYODYNIA.

BY A. T. WOODWARD, M.D.,
Of Brandon, Vt.

Coccyodynia consists in some abnormal condition of the coccyx, which gives rise to a variety of symptoms, the most obvious of which is pain referred to the immediate region of the bone itself. It was described as a distinct affection for the first time in 1844, by Dr. Nott, of New York, under the name of neuralgia of the coccyx. Of frequent occurrence, it is most common in women who have borne children, although it is not confined to them. Its causes are, parturition, blows and falls upon the coccyx, influence of cold and pressure, uterine and ovarian disease.

Hitherto all writers upon this subject have enumerated local symptoms alone in connection with this lesion, and the signs regarded by them as pertaining to coccyodynia are as follows: Pain over the coccyx upon sitting down, upon rising from that posture, attending other exertions of muscles in that region, and during defecation.

With such a conception of the symptomatology I operated upon the first case that came under my care. The patient was under treatment for uterine disease. She was able to walk about her room, but it was impossible for her to rest in the sitting posture, so unendurable was the pain caused by a tender coccyx. During this period she complained bitterly of pain in her head, chiefly of pain in the occipital region. The operation was performed in order to remove the great inconvenience due to the state of the bone; and when the wound had healed, that object was found to be fully attained. An unexpected result also had been produced. For the cerebral pains, which had been very harassing, and for which I had considered a hypertrophied cervix uteri responsible, had been entirely cured.

Six cases of coccyodynia have been placed in my hands since I treated the one just mentioned. In each of them there were present the symptoms plainly arising from an irritable state of the tip of the spine, and in each of them there were present at the same time cerebral symptoms of a peculiar nature. The patients complained of severe pain in the head, especially when in a supine position. In one case, the greatest pain was in the anterior half of the brain; it was attended by a dull, heavy pain in the back of the neck, close to the skull. This patient described her head as seeming to lie in two pieces upon the pillow during the severest attack. Another says she suffered intensely from great throbbing and burning pain in the back of her head and at the end of her spine. Still another was unable to designate the character of the pain, save that it was a sensation in the back of her head and neck, not like any headache, but intensely severe and exceedingly prostrating. This singular pain experienced by these patients was different from sick headache, or from nervous headache, so called. It was a dull, heavy, or a throbbing and burning, or an almost indescribably intense aching in the occiput and in the back of the neck. A sense of fear and dread of the present and of the future hung over the minds of these patients.

Upon the degree of severity of these symptoms will depend the amount of disturbance of the general health. Sometimes the patient will complain of the state of her coccyx more as an inconvenience than as a serious affection. In other cases the disease may be severe enough to keep her in bed, and may be complicated with further nervous disturbances of a singular and alarming nature. The patient's limbs may tremble, as with paralysis agitans. She may suffer from attacks of dyspnœa. But one such case has come under my observation. The patient describes them in these words: "I felt as though I was held in a vise, the inhalations and exhalations both being difficult to perform, especially the latter. My face would be spotted and my hands and limbs purple and cold. The attacks usually came on from the exertion of getting out of bed in the morning. The most severe one lasted five hours." The sight may be affected. The same patient described herself as being unable to see through the "specks which were continually falling before her eyes."

The duration of coccyodynia is not ascertained. It might wear itself out in time, perhaps. But experience indicates that its course is not of such a nature, but that it will continue until an operation relieves the patient's suffering. In a certain number of cases the progress of the disease seems to be from bad to worse, though we are hardly warranted in supposing that it might ever terminate fatally.

The cause of the symptoms is, in some cases, to be found in a carious state of the coccyx, in others, in a displacement of the bone, so that it presses upon some adjacent sensitive tissues; in still other cases it is obscure. The local symptoms are explained by the traction of muscles attached to the irritable bone, or by the pressure exerted upon the latter by foreign substances, or by both. The cerebral and other symptoms relating to the nervous centres may be the result of pressure upon the spinal nerves adjacent to the coccyx, or of the caries, the irritation set up by one or all of these causes being reflected to the cerebrum through the spinal cord.

The treatment is removal of the coccyx. The bone may be disarticulated from the sacrum, or the operator may content himself with removal of the last two segments only. According to my experience the latter procedure is sufficient. Upon five cases I have operated, not to eradicate the local distress, but in order to cure the distant sympathies detailed above. In every case the operation was a gratifying success. And I am, therefore, impelled to believe that not only a radical cure of the local trouble may be confidently anticipated from the treatment, but also complete disappearance of the peculiar pain in the head and neck, and restoration of the patient's health.

Pumpkin Root as a Toothache Remedy.

A piece of dried pumpkin root held against the aching tooth, or gently bitten by it, is a favorite remedy in Arabia.

Medical Societies.

INTERNATIONAL MEDICAL CONGRESS.

Abstracts of Papers.

(*Concluded from page* 378).

THE CURABILITY OF UTERINE DISPLACEMENTS.

By Paul F. Munde, M.D. (New York). Finding that the text-books either entirely omitted all mention of the possibility of permanently curing displacements of the uterus by any of the methods in use, or gave but vague statements on the subject, and impressed with the importance of having some positive conclusions on this matter, both for the sake of the patient and the satisfaction of the physician, the author had analyzed the cases of displacement which had come under his care (895), and had arrived at the following conclusions: 1. Displacements of the uterus are permanently curable in the large majority of cases only when recent, or when a complete tissue metamorphosis, as occurs during pregnancy and after parturition, takes place. 2. Chronic cases (of more than a year's standing) are but rarely curable permanently, except occasionally under the last named circumstances. Apparent cures reported by some authors and witnessed by many physicians, soon show themselves to have been but temporary. 3. Pessaries form unquestionably the most practical, rational and (temporarily) the most efficient means of treating uterine displacements. Cures are but rarely accomplished by them. 4. Medicated (chiefly astringent) tampons, intelligently applied every day by the physician, give the best chances for permanent cure. This is particularly true of prolapsus, but holds good for all forms. 5. Electricity locally applied deserves more extended application. 6. All methods should be persevered in for months and years before success is to be expected.

TOTAL EXTIRPATION OF THE UTERUS.

By William Freund, M.D. (Strasburg). The author said that his experience of three years, which had elapsed since his first publication on total extirpation of the uterus, and the works by others on the same subject which had appeared within this interval, had rendered his judgment clear as regards the most weighty points in the matter. There could be no question that, in carcinomatous disease of the uterus, extending over a considerable portion of this organ, total extirpation was the operation indicated. Some time ago surgeons repeatedly recurred to this operation, and tried both the operation through the vagina and that through incision of the abdominal walls. The results of these attempts were so unfortunate, that for a long time no further were made. When Dr. Freund had put his method to the test, with a favorable result in the first case; and when the first cases operated upon by Dr. Martini in Breslau, Dr. Kochs in Bonn, Professor Olshausen in Halle, Professor Schröder in Berlin, Dr. Veit in Berlin, Professor Spiegelberg in Breslau, Dr. Kuhn in St. Gallen, had likewise proved successful, the hope, and even a somewhat excessive confidence, that he had at last safely solved this great problem of surgery, was intelligible and justified. But when unfavorable results were frightfully multiplied, when, also, the mournful fact became clear that recurrences did occur, discouragement and opposition appeared on many sides. Greater safety to life, according to most recent experience, was secured by the total extirpation *per vaginam*, carried out according to the principles of Czerny, Billroth, Schröder, Martini, and the abdominal total extirpation, modified according to the directions of Bardenheuer, Breisky, Rydygier, Kolaczek, and M. B. Freund. The leaving open and drainage of the peritoneal cavity, the simple ligaturing of the vessels of the severed broad ligaments, step by step, made the operation shorter, less laborious, and hastened the healing. Dr. Freund had convinced himself by experiment upon the dead body that, after separation of the cervix uteri from the vault of the vagina, it was easy to draw up the uterus through the abdominal wound above the symphysis. Dr. Rydygier and the author had carried out this mode of operating, first recommended by Breisky. By drawing up the uterus by the tenaculum forceps invented by Dr. Freund, the uterus was rendered at once comparatively bloodless. The severing of the cervix all round from the vagina, he had carried out, without chloroforming the patient, immediately before the actual operation. The results of the vaginal total extirpation, as regards recovery, appeared to be very good; and Kolaczek affirmed that, in the method of abdominal total extirpation, as practiced by him and Martini, a fatal result was exceptional. The operation might be undertaken as a not very dangerous one in the early stages of carcinoma and sarcoma, in which it gave a promise of radical cure. Whether the vaginal or the abdominal extirpation was to be performed, must be decided according to the individual case. If the uterus were very large, and the vagina very narrow, the abdominal total extirpation must always be undertaken. With a small uterus and capacious vagina the vaginal operation was to be preferred: but the abdominal operation had a great advantage, in facilitating and ensuring the carrying out of the separation of the uterus through sound tissue. On July 5th Dr. Freund extirpated the uterus by the abdominal method, in spite of the uterus having been small and the vagina sufficiently large, in order to remove several cancerous intra-abdominal (iliac) glands. Advanced knowledge had shown that the danger of bleeding was not so great as was once supposed; and the danger of the peritoneal aperture was no longer to be considered—nay, rather, that the keeping open of the peritoneal wound was highly desirable.

ANTISEPSIS IN MIDWIFERY.

By O. Spiegelberg, M.D. (Breslau). The author said that the great reform in surgery brought about by the antiseptic treatment could not fail to have a deep influence upon the treatment of the complications in childbed, as it was well known long ago that the latter were the same as arose from wounds. If, however, scrupulous cleanliness, which had been advocated long ago, favored a normal course of the puerperium, the practical gain was not very great. The idea that puerperal wounds were infected, and that inflam-

mation of the genital organs was initiated by germs coming from outside, became more in vogue; and the idea that phlogogenous matter might be produced spontaneously within the genital tract was almost abandoned. The consequence of this idea was recommending the most scrupulous cleanliness of hands and instruments; forbidding practitioners engaged in midwifery to attend other patients, forbidding students engaged in dissecting to attend midwifery cases; forbidding nurses attending cases of puerperal fever to attend normal cases at the same time. The experience that all these measures only slightly reduced the number of bad cases, originated the idea of secondary antisepsis. Intra-uterine irrigations and drainage came into use, but without much avail; the opinion took root that there existed an essential puerperal process. The application of the theory and practice of Lister's system to the puerperium meant the strictest cleanliness and antisepsis during birth, both on the part of the persons attending the mother, and of the mother herself. Air must be prevented from entering the genital tract; and as that was not wholly unavoidable, disinfection by frequent irrigation with antiseptics during birth must be practiced. After birth, care must be taken to secure perfect rest for the genital tract, to encourage involution, avoiding every intra-vaginal or intra-uterine manipulation which was not absolutely necessary; if such were necessary, it must be done under strictly antiseptic precautions. Secondary antisepsis—after the infection had taken place—was not of much avail. It was only directly useful in processes of decomposition, so long as they had not passed the surfaces of the tract, and had not yet attacked the parenchyma of the organs. Otherwise, antisepsis was only a palliative, but no trustworthy remedy, since drainage and irrigation did not hit the deep seats of the disease, and did not remove or destroy the entered germs, not to speak of the inconveniences of the practical application of the secondary antisepsis.

AMPUTATION OF THE NECK OF THE UTERUS FOR CHRONIC METRITIS.

By A. Le Bond, M.D. The following were the author's conclusions: 1. Amputation of the neck of the uterus may be practiced for chronic metritis when the disease has resisted other methods of treatment. 2. The operation, being undertaken for the cure of a disease which never proves fatal, should be performed after the least dangerous method. 3. The neck should be amputated at the fundus of the vagina by means of the galvano-cautery.

MORBID GROWTHS OF THE EAR, AND THEIR TREATMENT.

By Laurence Turnbull, M.D., (Philadelphia). The author said that all morbid growths of the ear might be comprised under the following heads: 1. Sebaceous, encysted, osseous, fibrous, fibro-cartilaginous, and telangiectatic or bloody tumors, associated with caries of the temporal bones or mastoid process, and involving the auditory nerve or some of its branches. 2. Morbid growths, including angiomatous, epitheliomatous, sarcomatous, chondromatous, and alveolar; these might fill the external meatus, or the internal auditory canal, and finally involve the auditory nerve, causing death from marasmus, pressure on the brain, or basilar meningitis. 3. Osteo-sarcomata, chondromata, lympho-sarcomata, fibro-sarcomata, involving the common trunks of the facial and auditory nerves, the tumors being found at the bottom of the internal ear. 4. Tumors might be gliomata, cerebral tumors, or morbid growths, usually found involving the eye at first; but, in a case described by Bruckner, which was the result of a fall on the back of the head, accompanied with complete deafness, giddiness, and inflammation of the middle ear, pulsating tinnitus, and ending fatally. 5. Fatty metamorphosis of the organ of Corti, resembling sarcoma of the auditory nerve, as described by Moss; amyloid degeneration of the auditory nerve, as described by Voltolini; and corpora amylacea, found in the semicircular canals of man, and described by Lucae. Where morbid growths of the ear could be reached, the only successful plan of treatment was early removal by the knife, preventing danger of hemorrhage by the use of the ligature, clamp-forceps, a thermo-cautery, or galvano-cautery. Diseased bone should be removed by the forceps, sharp spoon, revolving knives, or the surgical or dental engine. It was most important to remove all vascular or polypoid growths as soon as they were brought to the notice of the aural surgeon. All puncturing or irritating by means of needles, small, sharp knives, or caustics, was to be entirely avoided; for all such surgery tended to increase and inflame them, and might change an originally benign growth into a malignant one. The only remedy that Dr. Turnbull found to prevent the spread of malignant growths was some of the preparations of arsenic; and none had been borne so well as Fowler's solution, given in small doses, and continued for a long period.

THE FUNCTIONS OF THE EUSTACHIAN TUBE.

By Edouard Fournié, M.D. (Paris). Dr. Fournié agreed with those physiologists who considered that the principal functions of the Eustachian tube were to admit air into the tympanic cavity, so as to preserve the air in the cavity in equilibrium with that external to it, and to give exit to the secretions formed in the cavity. Moreover, he believed that one of the essential functions of the tube was to prevent unpleasant resonance of external and internal noises. This function assumed a permanent opening of the tube. By certain experiments he believed he could prove that it was so, and that the muscles usually considered dilators were in reality obturators of the tube. Dr. Rumbold (St. Louis) thought that there was always a passage open to the cavity in the normal state, as the tension of the tympanic membrane ought always to be uniform.

THE ACTION AND USES OF ANTIPYRETIC MEDICINES.

By Professor Foker (Groningen). While there is no great difficulty in understanding the mode of action of simple refrigeration in the treatment of pyrexia, that of antipyretic remedies, administered internally, is still obscure. We must assume, either that they lower the temperature of the body by interfering with the circulation, or that they exert a destructive action, in virtue of their antiseptic properties, on the low organisms

to which the pyrexial phenomena are presumably due. The second of these hypotheses is the more likely one. It may, of course, be objected that such remedies can never be administered in sufficient quantities to insure their presence in the blood in such proportions as to render it aseptic, or, at any rate, to exercise an antiseptic influence. It must not be forgotten that any hostile factor, though unable of itself to check the multiplication of the organisms, may succeed in doing so when combined with others equally hostile to bacterial life. It is quite possible, moreover, that antipyretic medicines may accumulate in particular organs, which may then exert a disinfectant influence upon the blood. Antipyretic remedies may legitimately be given in febrile maladies, when the heat of the body is such as to threaten the patient's life, or even the integrity of his tissues. Under such circumstances, those aromatic remedies which are, at the same time, bacterial poisons, should be preferred to physical methods of refrigeration. But when the temperature of the body does not rise to a dangerous height, the employment of such remedies in antipyretic doses is undesirable; since a degree of heat only a little above the normal temperature of the body is injurious to the vitality or the virulence of the pathogenic organisms. It is quite possible, indeed, that the febrile heat may be one way in which the system reacts against these organisms, and tends towards recovery. In all cases, therefore, when the temperature does not rise so high as to be of itself a source of danger, physical refrigeration should be avoided, and the antipyretic remedies should only be prescribed in relatively small doses.

TARTRATE OF QUINOLINE, A NEW ANTISEPTIC AND ANTIPYRETIC AGENT.

By Julius Donath, M.D., (Graz). Dr. Donath said that, as regards its physiologieal action, he found that tartrate of quinoline lowers the temperature of the body very materially when introduced into the circulation; in the proportion of 0.2 per cent., it completely prevents the lactic fermentation of milk, the decomposition of urine and gelatine, and the development of bacteria in artificial cultivating fluids. Therefore, tartrate of quinoline is superior in antiseptic power to sodic, salicylic, carbolic acid, quinine, boracic acid, copper sulphate, and alcohol. In the proportion of 0.4 per cent. it prevents the putrefaction of the blood and the curdling of milk. In the proportion of 4 per cent. it completely destroys the coagulability of the blood, and lowers the temperature at which albumen coagulates. It is decomposed in the system, and does not appear in the urine. Therapeutically, quinoline is a very powerful antipyretic in enteric and intermittent fever; it has a striking effect in periodic neuralgia, and is an excellent local antiseptic. It may be given to adults in doses of one to two grams, wrapped up in wafers. Children take it easily, dissolved in equal parts of syrup and distilled water. It does not cause any unpleasant after effects, and the absence of giddiness and tinnitus is especially noted.

ON INFLUENCE OF HYDROCHLORATE OF QUININE ON MALARIAL GERMS.

By Dr. Ceci (Cerino). Dr. Ceci gave an account of experimental researches made in the laboratory of Professor Klebs, of Prague, on the influence exerted by quinine hydrochlorate on the development of germs contained in malarial soils. A cultivation liquid of a 5 per cent. solution of isinglass was employed, infected from different sources, and in every case it was found that the presence of very minute proportions of this salt exercised a remarkable power in preventing or checking the development of the *schizomycetes*. One part in 800 was sufficient to prevent any development of germs. The *bacilli malariæ* made their appearance very seldom in the cultivation-liquids, even when the proportion of quinine was very insignificant.

Editorial Department.

Periscope.

The Treatment of Burns.

The London *Medical Record* says that Dr. J. Troizki adds his testimony to that already published as to the value of solution of bicarbonate of soda as a dressing for burns (*St. Petersburgh Med. Woch.*, 1881, No. 19). He says that during the previous year he noticed twenty-five cases of burns, mostly of a severe nature. Sixteen of them were received in a fire in a village, during a strong wind, when the inhabitants, in order to save their property, were obliged to work in the flames. In all these twenty-five cases bicarbonate of soda was exclusively applied. The result of this treatment was so favorable, that the author considers himself justified in pronouncing this remedy the best and most efficient in burns of all kinds and degrees. Even in extensive burns of the second and third degrees, the pain was soon alleviated by the application of compresses soaked in a solution of bicarbonate of soda; and the wounds soon healed, leaving but few scars and no impairment of the functions of the affected parts. No evil results from this extensive application of bicarbonate of soda, which might suggest the reception of carbonic acid into the blood, were noticed. Of the ten cases of which a detailed account is given by the author, one rather serious case may be related, in which the burns had spread over half the body. The whole face was stripped of epidermis, the hair was singed off, and the front of the neck, chest, and abdomen, and the dorsum of the foot, presented burns of the second degree; burns of the third degree were also found on the right mammary gland and on the right forearm, all the muscles of which were exposed as if prepared by dissection. A solution of the bicarbonate of soda was applied to these burns with a most conspicuous success; the patient felt relieved, and

a cure was effected in four weeks; but the healing of the burns on the right breast and on the forearm lasted two months. The scars which were left were insignificant, and the mobility of the fingers was nearly normal. As regards the application of bicarbonate of soda in burns, the author distinguishes three methods: 1. Powdered bicarbonate of soda is strewn over the burned parts. 2. Linen rags, sprinkled with a solution of bicarbonate of soda (1 in 50) are laid on; as soon as these rags become dry, they are replaced by others or are moistened again in the solution. 3. Linen rags are applied in the same manner, but are kept constantly upon the burns, and moistened by pouring the solution over them. The first method suffices only for burns of the first degree. Change of the moistened rags is chiefly adapted for burns of the third degree, attended with much suppuration. In exchanging the dry rags, the pus which has accumulated underneath them must be carefully washed off, that it may not be received into the blood; and then a fresh rag soaked with the solution must be placed upon the clean granulating surface. The third method is applied solely in burns of the second degree. Changing the compresses would in these cases only irritate the exposed surface, and, by causing a more copious suppuration, delay the healing process. The beneficent effect upon burns of the solution of bicarbonate of soda the author considers to be due to the anæsthetic, antiseptic, and disinfecting property, which the bicarbonate owes to the ready disengagement of carbonic acid from it. Herr Troizki has also made experiments with other antiseptic and disinfectant agents, but has come to the conclusion none are so useful as the soda.

The Treatment of Gastro-Intestiral Inflammation of Infancy and Childhood.

In a paper which was read before the Franklin County (Arkansas) Medical Society, and published in the *Mississippi Valley Medical Monthly* for August, 1881, Dr. J. V. Spring, of Mulberry, Ark., says:—

As to opium, notwithstanding quite a large number of our modern practitioners deal out opium most heroically, in the treatment of this as well as other forms of diarrhœa, I confess, from my own observation and the teachings of some very eminent writers, I am inclined to avoid opium and all of its preparations, either alone or in combination, as far as possible. I will agree that we often meet with cases where it seems indispensable, but even in such cases we can substitute for it; and, if used at all, it should be with great caution, and only for temporary relief, not with the idea that it may possess any curative powers.

Again, I cannot agree with those practitioners who advocate the use of astringents, and I am satisfied that so long as we are dealing with uncomplicated intestinal inflammation, any astringent, or astringent combination will be contraindicated. The following is the plan of treatment under such circumstances: First, I have a tan bath prepared by boiling red or black oak bark until I get the ooze as strong as it can be made in a short time, then, while at a temperature of 75° or 80° Fahr., place the patient in the bath; have a sufficient quantity in the tub so that it will come up to the shoulders while the patient is held in a sitting position, and keep him there until he becomes quiet, all evidence of restlessness giving way, which in some cases may take ten or fifteen minutes, then rub him well with a rough towel, give him a thorough rubbing with cod-liver oil from head to foot, place large cloths saturated with the ooze over the stomach and bowels, wrap him in flannel, and put him to bed, withdrawing all other treatment, keeping water and every character of nourishment out of the stomach. Repeat the bath and cod-liver oil every three or four hours, until all bad symptoms give way. Usually, I find improvement very perceptible after the third or fourth application, sometimes from the first. The patients usually sleep quietly for an hour or more after each bath, and with due care directed to the first nourishment taken or medicines exhibited, the little fellow will soon be convalescent.

A prescription that I employ, and find it answers the purpose in a large majority of cases, is this:—

℞. Subnit. bismuth,
Prepared chalk, āā ʒij
Syrup bals. tolu, ʒj
Aquæ menth. pip., ʒiv. M.
Sig.—Teaspoonful every three hours.

I sometimes substitute syrup ginger for the tolu, and when I find that quinine is indicated, direct each dose to be given in a teaspoonful of the above mixture.

On Diaphragmatic Hernia.

Dr. Lacher has contributed to the *Deutsches Arch. für Klin. Med.*, vol. xxvii, a valuable monogram on diaphragmatic hernia, epitomized in the *British Medical Journal*. He first describes three new cases, and then gives details at length of cases already described in standard literary works. He divides this form of hernia into two great groups, viz., the congenital form (123 cases) and the acquired form (143 cases): 10 cases are uncertain as to their nature. Out of 276 diaphragmatic herniæ, 28 only were true herniæ, with a sac formed from the pleura or peritoneum, or both; 225 cases were on the left side, 42 on the right. In 6 the position was not specified. In the congenital, as in the acquired form, hernia on the left side was most frequent. Among the contents of the sac, the stomach was found in 161 cases, the colon in 145 cases, the great omentum in 96 cases; portions of small intestine in 83, the liver in 45, the duodenum in 35, the pancreas in 27, the cæcum in 20 cases, the kidney in 2. Men are far more subject to acquired diaphragmatic hernia than women, and most frequently in the prime of life. The diagnosis is generally difficult; signs of pressure on the heart and lungs; dyspnœa; very variable reflex symptoms; troubles in digestion, and sometimes indications of incarcerated hernia, are the varied and very inconstant signs of diaphragmatic hernia, that most frequently leads, before detection, to death. Great care in matters of diet is the only therapeutic means that can be

employed in this disease. Von Nussbaum has proposed the introduction of the whole hand in the rectum, and careful traction of the displaced contents of the abdomen; after symptoms of strangulation, laparotomy should be undertaken.

Fungoid Origin of Diphtheria.

Dr. Michael Taylor, of Penrith, in recording an isolated outbreak of diphtheria, expresses his belief in the influence of dampness as an exciting cause, and in the connection with that disease of certain fungi associated with dampness. Three children, living in the same house and occupying the same bed-room, were all seized with diphtheria last August, in a district then free from any epidemic. The house was very healthy until the water-spouting of its roof got out of order. A great rainfall in July caused one wall of the bed-room to become saturated, through leakage of the spouting, the paper on the wall facing a passage between the apartment and a second bed-room became sodden and separated from the plaster, and small clusters of a toadstool (*Coprinus*) grew on the wall, as well as a fine, thready, bluish mould. The drainage of the house and its drinking-water supply were very good. Excepting near the damaged spouts, the house was dry; and it is remarkable that the three children slept several weeks in their warm cribs, in the damp room, without suffering in any way, and it was not until the fungi appeared that they were attacked with true diphtheria. This is in accordance with Professor Laycock's theory, that diphtheria depends on *Oïdium*, or potato-fungus, for although in Dr. Taylor's case another vegetation was in question, there is fair reason to believe that the sporules of many kinds of fungus may not merely irritate, but directly infect, the mucous membrane of the throat.

Aromatized Glycerine and Its Uses.

The following is Professor Jaccoud's formula:—

℞.	Glycerine,	40 grams
	Rum or cognac,	10 grams
	Essence of mint,	1 drop. M.

This mixture, which is of an agreeable taste, is well tolerated by the stomach, so that after several months of its uninterrupted employment it gives rise neither to satiety nor disgust. The addition of the alcohol has simply in view the modification of the insipid taste of this drug, and to aid in its digestion. Its dose would be quite insufficient as an alcoholic medication. The quantity of glycerine mentioned in the formula is the minimum daily dose, and it may be increased to fifty or sixty grams. This last quantity, however, should not be given except to persons who present no sign of abnormal excitement of the nervous system or of the action of the heart. Moreover, whenever there is any agitation or unusual loquacity, obstinate sleeplessness, or a persistent elevation of temperature (in the absence of any pyretogenic incident) of 0.5° C. in relation to the mean temperature of the period prior to taking the glycerine, it will be an indication that the serviceable dose has been exceeded. Glycerine should be employed for the purpose of stimulating the digestive functions, and saving the waste of tissue during the non-febrile period of phthisis, when cod-liver oil has ceased to be tolerated. The dose of aromatized glycerine should be divided into two or three takings.

On the Treatment of Diphtheria.

In a clinical lecture on diphtheria, delivered to the students of the Hospital College of Medicine, Louisville, Ky., and published in the Philadelphia *Medical Times*, September 10th, 1881, Dr. John A. Larrabee lays down the following rules:—

Muriated tincture of iron, freely and persistently given, should form the basis of your treatment; its astringent property tends to prevent the organization of the membrane, while its effects upon the constitution tend to sustain the life of the patient, and thus enable him to throw off the membrane.

Another point I wish to speak of is this: the use of alcohol has been brought forward as something new by the members of the medical profession. Any poison in the blood tending to destroy life by destruction of the blood corpuscles, as well as by its debilitating effects upon local tissues, indicates a stimulant and a preservative. In alcohol we have the most powerful agent to prevent the destruction of animal tissues. Its stimulant property needs no comments. Give muriated tincture of iron, then, and alcohol, with nourishment, but give the iron according to Col. Mulberry Sellers' directions for the use of his eye. Give along with this a whisky-toddy, a milk-punch, or, what is better, Christmas eggnog, and don't withhold it out of fear of intoxication. The amount of alcohol that can be taken under these circumstances with immunity is astonishing. I have myself given a child, seven years old, a pint of whisky in twenty-four hours, without producing any symptoms of intoxication.

Bones Formed in the Eye.

At a recent meeting of the Dublin Pathological Society, Mr. Story presented a specimen and said: This is an example of the not very uncommon formation of true bone in a diseased eyeball. I have no history of the case, but the specimen exhibits the ordinary characteristics of ossification in the chorioidea. According to the description given in Pagenstecher and Genth's Atlas, Plates XVIII and XIX, bone in the chorioid occurs as an ossification in a structureless, homogeneous, colloid exudation, which seems to spring from the elastic lamina of the chorioid, and is unaffected by strong acids or alkalies. This colloid matter exhibits in places a tendency to fibrillation, and the bone corpuscles are observed in lines parallel to this fibrillation. I cannot make out the exact origin of the colloid matter in my slides, but I conjecture it springs from the elastic lamina, as is normally the case. In all other respects my specimens exhibit the same appearance as

Pagenstecher's plates, and in addition show numerous unmistakable Haversian canals, which do not seem to have any perfectly regular arrangement; at least I meet with them equally in longitudinal and cross sections. Ossification in this colloid matter proceeds, I take it, in the same fashion as it does in the formation of those bones which are laid down in membrane, but why this so frequently occurs in the eyeball I cannot explain. The pathological condition is not at all uncommon, but I thought the specimen would be interesting to the Society in connection with the piece of bone which Mr. Stokes exhibited before Christmas, which was removed from a lumbar abscess, and which gave rise to a good deal of discussion at the time.

Psychology in Medicine.

The *Lancet* says, in a recent issue:—

We sometimes hear of men who claim to take or leave the study of psychology at pleasure. They might as well affect to treat histology, or physiological chemistry, as a separable part of medicine. Humanity is suffering from the arbitrary relegation of what are called "'mental diseases" to the care of a specialty. It would be as reasonable to refer the pathology of the secretions to one class of practitioners while another took charge of the organs by which these secretions are elaborated! How could the organs be studied or treated without regard to their functions and work? And how, we may ask, can the body be studied or treated apart from the mind, in and through which it is often possible to gain the best, or only, view of its inner workings? We are not speaking in any metaphysical sense, but practically. It is time to put in an earnest plea for the recognition of psychology as an intimate part of physic. Every advance we make in the exploration of Nature renders it increasingly evident that body and mind are inalienable—as in health so in disease. The mental phenomena of life are the direct effects or the reflexes of the physical state. It is, therefore, obvious that the moment is approaching when the recognition of unity must be conceded. We are not now speaking of unity of ultimate constitution. Of the mysterious *something* which makes man more than an animal, science knows nothing. Those of its professors who worship "the Unknown," confess that the object of their faith stands outside the confines of human intelligence. At the same time they claim to recognize, and ask the most crudely—or may we borrow Dr. Hughlings Jackson's emphatic word and say *brutally?*—materialistic of physicians to recognize the effect which the outer centring of human hopes and aspirations must have on the psychology of man's nature. Even if human emotions be the outcome of viscera, they are generally affected by the manner, and the real or supposed object of their exercise, and they react on the viscera from which they spring with a force and an intensity due to the outer sphere in which they operate. It follows that this outer sphere—the *spiritual*—must be recognized by the physician in his dealing with the mental and physical constitution of man as a whole. In short, the whole range of psychology must be included in the province of practical physics.

On the Cause and Treatment of Hemorrhoids.

In an article published in the St. Louis *Courier of Medicine*, for September, 1881, Dr. S. S. Todd, of Kansas City, observes:—

Constipation of the bowels is the almost constant predisposing, as the use of drastic cathartics is commonly the exciting, cause of the disease, and no treatment can be successful that does not embrace within its scope an assurance of one daily easy evacuation of the *lower bowel.*

The first step in the treatment of *recent* cases should be the administration of a saline cathartic, and the best is sulphate of magnesia. After this, the following pill may be used: compound extract colocynth, grs. xxx; extract nux vomica, grs. xx; extract belladonna, grs. x. Divide into 40 pills. One to be taken every evening on going to bed.

The patient should also have a fixed hour at which to go to stool, and steadfastly restrain any desire for this at other times.

Should the pill above mentioned cause a liquid stool, or should it cause more than one stool, your object will be defeated if you persist, and the quantity of compound extract of colocynth must be diminished. On the other hand, should it fail to secure one soft and consistent motion daily, the quantity of colocynth must be cautiously increased.

In addition to the above, the following will be found to give instant relief from pain, and accelerate the cure: iodoform, ʒj; balsam Peru, ʒij; cocoa butter and white wax, of each, ʒiss; calcined magnesia, ʒj. Incorporate the mass *thoroughly*, and divide into twelve suppositories. Insert one after each evacuation of the bowels, and oftener, if needed.

Old and chronic cases he treats as follows: All tumors found at the verge of the anus, and covered in part or wholly with integument, are clipped off with the scissors. If situated within the external sphincter, the bowels having been moved with a dose of sulphate of magnesia given a few hours before, the patient is placed over a vessel, and directed to strain (a vessel filled with hot water is best). If the tumors do not come within reach in this way, the finger should be thrust into the bowel, provoking tenesmus, and the patient again be instructed to force the piles down. When within reach, the nates being separated by an assistant, the tumors are seized one by one with a forceps, and held, while, with the hypodermic syringe, from five to ten minims of a solution of nitrate of silver, one drachm to the ounce of distilled water, are injected into each, not stopping till all have been thus injected. No pain is felt except what is caused by handling parts rendered hyper-sensitive by protracted irritation.

One of the suppositories before mentioned may now be passed into the bowel, and thenceforth, if the treatment already given for removal of constipation be followed up assiduously and patiently little further inconvenience will be felt and no further treatment required. Even though the suppository be omitted, little pain is felt, and the

patient goes at once about his business. The tumors immediately become hard, atrophy, and in about ten days have wholly disappeared.

Algidity in Strangulated Hernia.

The recent communications of M. Verneuil to the Societé de Chirurgie (June 30th and July 7th) have forcibly called the attention of surgeons to a little known mechanism of death in strangulated hernia. It concerns those cases where death supervenes after reduction or operation with a cortege of symptoms always the same, distinct fall in the temperature being the most marked phenomenon; while at the autopsy no abdominal lesion will be found sufficient to explain the fatal termination.

The surgeons at the commencement of this century were well acquainted with these cases, so difficult of explanation, and Bretonneau considered the fatal issue as due to septic peritonitis. M. Verneuil was, however, the first to remark in such cases the existence of visceral congestion, particularly of pulmonary congestion, and in 1873 M. Ledoux, one of his elèves, published an interesting thesis on the subject. Since that period M. Verneuil has been enabled to study new cases and to determine with greater precision their history, which is as follows:—

The patient enters the service with a strangulated hernia; the surgeon finds the ordinary symptoms of strangulation, but notices also that one of them, viz., algidity, is very marked; he operates, nevertheless, because such action offers the patient the only chance of recovery, but he reserves the prognosis on account of the gravity of the general condition. After the operation, there is but slight attempt at reaction, the patient becomes colder and colder, alvine evacuations may take place, but no urine is passed. There is almost absolute anuria, and if a small quantity of urine is obtained by catheterization, it is almost always albuminous.

Soon the respiration becomes accelerated; although the abdomen is not distended with wind or painful, as in peritonitis, auscultation demonstrates the existence of congestion of both lungs, algidity becomes more marked and death ensues either a few hours after the operation or within forty-eight hours.

At the autopsy, the most minute research shows no signs of peritonitis, while intense congestion of both lungs is found, often accompanied with renal congestion.

The pathologic physiology of such congestion is a mooted question; perhaps the opinion of M. Le Fort is the most tenable; he considers such congestion as nervous phenomena, having as point of origin the excitation of the abdominal sympathetic system. "Perhaps again, the intestinal lesions may become the point of departure of emboli, which would seem to be proven by the very curious cases of hemiplegia supervening after strangulated hernia, reported by Nicaise to the Société de Chirurgie in 1876." (Duplay.)

As a practical point to draw from these researches, it is advised that great attention be paid to the temperature and condition of the lungs before and after the operation, and therapeutic measures used accordingly.

The Suture of Bones.

The following case was reported this summer to the Clinical Society of London, by Mr. MacCormac:—

"The patient (who was exhibited) was a pianotuner, twenty-six years of age, who four months before coming to St. Thomas's Hospital had fallen upon the right elbow, and sustained a fracture of the olecranon. When admitted the limb was wasted, especially the triceps; there was no power of active extension; the line of fracture ran across the base of the olecranon, the detached portion being separated by two inches, and fixed to the back of the humerus, the condyles of which could be felt in the gap, no uniting medium being perceptible. On Jan. 6th Mr. MacCormac made a vertical incision three inches long, exposing the fractured bone and the articulation. There was no trace of uniting material, the fractured surfaces were covered with smooth fibrous tissue, and adhesions existed between the detached process and the condyles, and also between the end of the humerus and ulna. These adhesions were dissected out, and the periosteum being reflected, a thin layer of bone was cut off with a chisel, and by means of two wire sutures through holes drilled in the bone the surfaces were brought into close apposition. The wires were twisted and cut off so as to project at the centre of the wound, which was afterwards closed with catgut sutures. The operation was performed antiseptically, the joint being washed out with carbolic solution (1 in 30) before closing the wound. The first dressing was made on the fifth day, when the wound was found to be united, except where the bone sutures emerged, and these were removed in twenty one days. In forty days the patient left the hospital with very good active movement at the elbow joint, and apparently firm bony union at the seat of fracture. From first to last he had no pain or inconvenience. The wound healed without a drop of pus; the temperature occasionally rose to 99 8°; it was otherwise normal throughout. He has now perfect power of active extension. The arm cannot be made absolutely straight, but he is able to follow his trade as well as before.

Carbolic Acid as an Antipyretic.

At a recent meeting of the Société de Biologie, M. Raymond gave an account of the markedly antipyretic qualities possessed by carbolic acid, which he has administered in cases of typhoid fever. The acid is given simultaneously by mouth and rectum, to the amount of one gram per diem, fifty centigrams being divided into three pills, and a like quantity used in enemata. He declares that its administration on this plan is very soon followed by a great reduction in temperature, viz., to the extent of 3° or 4°C., and within half an hour most profuse diaphoresis is established. To ascertain whether this hypothermic effect was produced by the direct action of the carbolic acid, or indirectly through the diaphoresis, M. Raymond suppressed the latter by the injection of duboisin, and found the lowering of temperature to be unaffected. He found also that the antipyretic action was increased the longer the administration was con-

tinued. By employing larger doses, viz., two grams, toxic effects were produced, the temperature fell to 34°, convulsive tremors occurred, and carboluria appeared. At the suggestion of M. Vulpian, carbolate of soda was given in doses of one gram and a half, instead of the free acid, and the patient kept under the influence of the drug. The toxic effects did not appear, but the antipyretic action was still marked. The remedy does not, according to M. Raymond, limit the duration of the stages of typhoid fever; it controls the pyrexia of idiopathic erysipelas in a similar way, but has no influence on that of tuberculosis. It was pointed out that the antiseptic could not, of course, pass through the alimentary canal unchanged, so as to reach the ulcerated small intestine, and it would seem simply that it acted through the spinal cord and the vascular system. M. Hallopeau thought the acid might have a topical effect on the typhoid ulcers. M. Dumontpallier pointed out that it was not so good a regulator of the fever as refrigeration. M. Hanot made some curious observations, which he detailed more at length at the next sitting of the Society. He said that in two cases of adults suffering from typhoid fever, whom he had treated by carbolate of soda given internally, defervescence was determined on the fourteenth day in one case, and on the sixteenth in the other, the temperature falling 3° to 4° C. on the second or third day of treatment. In each case a peculiar rash appeared at the same time as the fall in temperature, the rash becoming pustular and varioliform in a short time. The pustules, on microscopical examination, were found to be formed almost wholly of bacteria mingled with a small amount of pus. The urine also contained bacteria. M. Paul Bert, in commenting upon this, went so far as to say that carbolic acid renders the organism unfit for the development of the bacteria, and causes the particular material in which they thrive to be eliminated by the skin and kidneys, and the bacteria following its elimination are found in these parts.

Treatment of Eczema of the Hand.

A case of this refractory disease is reported in the Dublin *Medical Journal*, by Dr. A. W. Foot:—

The patient was twenty-two years old. The disease was confined to the back of the hand and the clefts between the fingers, where were many fissures, the viscid secretion issuing from which formed crusts with a pustular aspect. The pruritus was very severe.

Each finger and the entire hand were wrapped round with strips of old linen soaked in a mixture of lead lotion and glycerine, and the whole then sealed up in gutta-percha paper. As the itching had quite broken her sleep at night, she had, for two or three nights, draughts with potassium bromide ʒss and chloral 15 grs., in chloroform water, and she was ordered ɱv of Fowler's solution in tincture of bark three times a day after meals. As there was no reason to starve her, she was given meat and porter every day.

The inflammatory action was soon moderated by the lotion, which was applied fresh every day, and the hand sealed up again after having had a jug of cold water poured over it. It was kept in a sling; the perfect rest obtained by slinging the muffled hand, and the exclusion of the air by the careful sealing up of the gutta-percha cover, are points to be attended to. Whenever the hand was let hang or rest in her lap, it got hot, heavy, and swollen, and began to throb. After three days of this treatment the heat, redness, and itching had abated; then a thirty-grain solution of nitrate of silver was carefully painted all over the back of the hand and fingers, from the wrist to the margin of the nails, avoiding the latter, and sealing up and slinging continued. In a few days she got a strong lotion of iodide of potassium to remove the blackening effects of the nitrate of silver, which it is quickly doing, and the sealing of the hand was discontinued. The arsenic had to be omitted for a few days in consequence of gastric irritation. The note of June 8th (she was admittted May 26th), is—she "has great use of the hand," and it is white, dry, and quite free from itching.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. T. S. Galbraith, of Seymour, Ind., sends us, in a reprint from the Louisville *Medical News*, August 13th, 1881, a paper on Pelvic Cellulitis, with cases.

——We have received, in the form of reprints from the Philadelphia *Medical Times*, two essays, by Dr. Edward T. Reichert; one on Ethylene Bichloride as an Anæsthetic Agent, with a consideration of ethylene methylethylate, ethylene ethylate, ethyl nitrate, and ethylidene bichloride; the other on Convulsions due to Depression of Spinal Reflex-inhibitory Centres, with special reference to the convulsions of apomorphine, atropine, strychnine, and other poisons. In the latter paper some of the long entertained opinions with regard to the action of those drugs are overthrown.

——"The Dangers and the Duty of the Hour" was the theme of an eloquent address, delivered before the Medical and Chirurgical Faculty of Maryland, by Professor William Goodell, of Philadelphia, which now comes to us in the form of a reprint from their *Transactions*. The thoughts expressed in this address were suggested to the speaker by the scarcity of children observed during his "Summer Jaunt," the danger of the hour being, in his judgment, *the faulty system of female education, the decay of home life*, and *the unwillingness of our women to become mothers;* and the duty of the hour devolving on physicians,

to remedy these evils and to fill our homes with prattling children. We will not say that the Doctor's fears are groundless, especially in certain circles, but we know streets in this city where children swarm like bees around a beehive.

——We have just received the Twelfth Annual Announcement and Catalogue of the Woman's Medical College of Chicago. The session of 1881-82 will open October 3, 1881, and close March 30, 1882, after which there is a spring term of twelve weeks.

Also the "Announcement" of the Baltimore Medical College, a new institution, which undoubtedly will meet "a long felt want." In addition to the ordinary branches there is also to be a Chair of Mechanical Denistry and Metallurgy. It is not stated where the lectures will be held, but the present collegiate year begins on the first day of October, 1881, and closes in March following. Subsequent sessions will continue from the middle of September to the first of May. It is further stated in the Announcement that "as the design of this school is to elevate the standard of medical education, it will not seek to make many doctors, but competent and good ones. It will afford its students time to acquire a thorough knowledge of the various branches of medicine, by an extension of its annual sessions to 7½ months, without increased expense for attendance upon the same. Two courses of lectures will thus be equivalent to the three now required in many medical schools. It will endeavor not to confuse the minds of students with many lectures each day, but will give them opportunities to digest what they hear, and to read, practice and review as they pursue their studies."

BOOK NOTICES.

Transactions of the Indiana State Medical Society, 1881. Thirty-first Annual Session. Held in Indianapolis, May 17th, 18th, and 19th, 1881. Indianapolis: Central Printing Co., 34 East Market street. pp. 378.

The address of the president, Dr. T. B. Harvey, of Indianapolis, on "The Advance in Medicine," was a philosophical review of the changes which medicine has undergone, chiefly during the past thirty years, and the causes which have led to these changes. Looking back over this period, and seeing what has been done in the past, the speaker said that we are justified in expecting much of the future. A short but excellent paper was read by Dr. J. W. Compton, of Evansville, on "Sanitary Progress." "State Medicine" was the subject discussed by Dr. Thaddeus M. Stevens, of Indianapolis, who pleaded with eloquence for greater attention to preventive medicine, for a higher standard of medical education, and wise laws to regulate the practice of medicine, and more especially for some means to diminish the evils—disease, poverty and crime—resulting from heredity. "Mental Hygiene" a subject of no less importance than physical hygiene, and intimately connected with it, was well handled by Dr. James Walter Hervey, of Indianapolis, who evidently had given much thought to the evils resulting from overwork, and improper work at school, and to the mental development of the young after school-life is ended and the struggle of life begins. Dr. William Commons read a paper on "Trichinosis," with report of cases. Numerous other papers of real merit were read, but want of space prevents us from noticing all. We shall, however, have occasion to quote more fully from some of these elsewhere. The volume of the transactions is gotten up in good style and strongly bound in cloth.

The Harrogate Waters, Data, Chemical and Therapeutical, with Notes on the Climate of Harrogate. By George Oliver, M.D. Lond., Member of the Royal College of Physicians, London, etc. London: H. K. Lewis, 136 Gower street, W. C. 1881. Cloth, small 8vo, pp. 224. For sale by Presley Blakiston, 1012 Walnut street, Philadelphia. Price $1.50.

Harrogate may be regarded as one of the most ancient of English mineral watering places, having been a favorite resort for three centuries. That during that period it has preserved its reputation is sufficient guarantee that the same is based on actual merit and not the result of mere advertising. A treatise which presents the true and unvarnished facts relating to the climate and physical geography of the place, as well as the composition and therapeutic use of the waters, cannot but prove of great value to British practitioners. The work before us appears to fill all these conditions, and being written entirely for the use of the profession, it is free from the objectionable features of the mass of pseudo-scientific works on popular health resorts. Although we believe that the American practitioner should be acquainted with the nature of the principal mineral springs in Europe as well as in America, a necessity for sending his patients abroad should rarely occur, as the numerous springs situated in the most salubrious regions of our country would readily meet every want.

THE

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FACULTIES IN LOWER ORGANISMS.

The power of independent action and the relation of such action to intelligence are themes which interest all thinking men, and to the physician and physiologist have peculiar attractions. The functions of brain and nerve fibre were at one time supposed to stand in close relation to mental action, if not to be identical with it. But the more closely one observes the actions of lower organisms, the more doubtful and distant do these relations become.

The researches of SIR JOHN LUBBOCK and others prove that in the ant, in spite of its low position in the scale of animals, we find far higher mental aptitudes than in the highest anthropoid apes. They have a well marked social organization. Some species are slave-catchers and slave-owners, and control their underlings with a judicious mixture of kindness and severity; they bury their dead in appointed cemeteries, and they even establish hospitals where the sick, especially those suffering from a contagious parasitic disease, are conducted and quarantined. Whether they have a corps of physicians has not yet been decided, but it is far from improbable.

In the vegetable world, the movements of plants have been studied with fruitful resul s, by the eminent naturalist, DARWIN. He, and his son, FRANCIS DARWIN, have explained satisfactorily the power possessed by the leaves of plants, of placing themselves at right angles to the direction of incident light.

Various experiments were made with plants, especially with beans (*Vicia faba*), vegetable marrow (*Cucurbita ovifera*), plantain (*Plantago media*), and cherries, the result of which was, in the main, to show that the behavior noticed was due to a specialized sensitiveness to light, called diaheliotropism, which is able to regulate or govern the action of other external forces, such as gravitation, or of internal forces, such as epinasty.

An instrument called the klinostat, arranged by HORACE DARWIN, was employed in working out these conclusions. It consists of a cylinder rotating slowly about its longitudinal axis, on which the seedlings under observation are grown. The cylinder being placed at a window, the plants are protected from all illumination except such as falls on them in a direction parallel to the axis of rotation. The cylinder rotates so slowly that no centrifugal action is produced on the plants, but rapidly enough to destroy all geotropic action. The seedlings, therefore, are entirely free to obey the stimulus of light, and their heliotrophic curvature is not liable to be influenced by gravitation. The method of slow rotation, as it exists in modern physiological research, is entirely due to SACHS.

The driving force is supplied by a common American watch-action clock. With this machine, says Mr. DARWIN, "I have easily been able to keep a box of earth and plants, weighing 1000 grams, in constant rotation, with the certainty that it will not stop. By gearing a stronger clock to the driving wheels, a very much heavier weight could easily be driven.

By such researches as these we may expect great advances will be made in the remote and

difficult branch of physiology to which we referred in our opening sentence.

HOSPITAL FOR ORAL SURGERY.

With the constant enlargement of the horizon of medical studies, that branch of surgery which has to do with the mouth, teeth, jaws and associate parts, occupies a useful position, rendered the more prominent by the great extension which dental science has obtained within the last few decades, especially in this country. It is a perfectly fair statement to say that in all that relates to dental and oral surgery, the United States leads the world, and Philadelphia the United States.

It is extremely appropriate, therefore, that in this city a hospital should be organized, devoted to this especial branch, and offering facilities for instruction not equaled anywhere else. The Hospital of Oral Surgery has an able staff, Professor J. E. GARRETSON, M.D., distinguished both as a lecturer, author and skillful operator, being surgeon in charge. No one could have been chosen more capable of developing its advantages to the student.

To understand the meaning of the Hospital of Oral Surgery is to understand that it means the inauguration of a new specialty in medicine, which specialty is to be accepted as something already so fully and firmly established that it needs but time to have its claims as fully allowed and appreciated by the general public as undoubtedly they are by the profession.

Oral surgery, unlike ophthalmology, has no boundaries which may be said absolutely to define it. It includes in its practice the care of the teeth, but its operations extend over a wide class of conditions, inclusive, certainly, of the most complicated and difficult performances in surgery. To be an oral surgeon according to the programme of the Oral Hospital requires, first, graduation in dentistry; second, graduation in medicine; third, special studies in the direction of mouth, jaw, face, and throat diseases. The course, as laid out, extends over a period of three years and six months.

The designation of an oral surgeon is found simply in the possession of a hospital certificate. This certificate implies, however, that its holder has passed examination before thirteen chairs; six in dentistry, seven in medicine, besides a special one on his particular department, which requires a week spent over operations in the dissecting apartment of the hospital, together with a second, which is employed in making and defending diagnosis before the class of the school. Assuredly no medical students of this country are put through a more prolonged or vigorous course. The oral surgeon, like his fellow specialist, the dermatologist and ophthalmologist, is seen to be a general surgeon, limiting his practice. While oral surgery includes dentistry, the two are not to be confounded; dental colleges represent the latter; the Oral Hospital, in its relation with medical and dental education, designates the former. This specialty certainly invites to its ranks students of surgical proclivities.

NOTES AND COMMENTS.

On the Prevention of Laceration of the Perineum.

At the meeting of the St. Louis Medical Society, May 7th, 1881, the Proceedings of which appeared in the St. Louis *Medical and Surgical Journal*, for August, Dr. G. Hurt read a paper on "Position in Relation to Injuries of the Perineum during Labor," in which he gives the history of several cases tending to prove that a sharply flexed and abducted position of the thighs, though convenient and necessary in some cases, is not conducive to the greatest degree of security to the maternal soft parts at the moment of the passage of the child's head through the vulva, nor to the speedy and safe delivery of the child.

In the autumn of 1877 the doctor attended a case in which the second stage of labor was somewhat tedious, and just as the head began to distend the perineum, the patient, as a matter of choice, took the left side position, with her thighs and knees sharply flexed. The fœtal head, which was unusually large, soon became impacted in the soft parts, uterine contraction became stronger and refused to intermit, the perineum appeared to have reached the point of its utmost distention short of laceration, being pushed down so that the fœtal occiput rose from

under the pubes, and yet the head was so completely enveloped by the expanded perineum, that a rupture of the latter seemed inevitable. At this moment, however, the patient, perhaps involuntarily, extended her limb to a line nearly parallel with that of her body, and coincidently with this movement the fœtal head passed through the vulva without any perceptible injury to the parts.

The next case reported was that of a primipara, in which the fœtal head became so tightly impacted at the vulva as to cause considerable delay, though the uterus was contracting with great force, and laceration seemed inevitable. The patient was on her back, with her knees sharply flexed and abducted. She was requested to straighten her left leg, and as she did so, the vertex became more prominent and the forehead slid over the perineum without causing even so much as an abrasion at the fourchette.

In other similar cases, extending the thigh, when the passage of the child was impeded by a too rigid perineum, was followed by the same happy result. This seems so plain that it is surprising no one has thought of it before, for, as the doctor points out, the perineum is not only relaxed by the extension of the limbs, but the degree of its inclination is increased so as to impose less resistance to the passage of the fœtal head, and *vice versa*; in the ratio that the limbs are flexed and abducted, the perineum and contagious parts are put upon the stretch, and consequently its resistence and liability to rupture proportionately increased.

Spontaneous Fracture of Pubis due to Osteo-Sarcoma.

Among the recent reports of the Société Anatomique (February 18) is the résumé of a case in the service of M. Legroux:—

For several months before entering the hospital, the patient had considerable pain in the back and left thigh, with marked œdema of the limbs and abdomen.

When received at the hospital, he was in a very cachectic state, with œdema of the limbs and posterior aspect of the thighs; there was considerable pain in the right gluteal region and groin of the same side; also slight effusion in the peritoneal cavity. During the period he was in the service the patient passed large quantities of pus in the urine; rectal examination demonstrated the absence of prostatic abscess, and catheterization of the urethra revealed no painful point; but there was stagnation of urine, over two hundred grams being withdrawn after micturition. Injections were regularly made with a one per cent. solution of boracic acid, but the urine always remained purulent. There was constant complaint of pain in the left leg and thigh, though the pain in the right had passed away, and finally the patient died in a state of coma.

At the autopsy, the bladder was found in the normal condition, but dilated; at the left side of the urethra and opening into the canal just in front of the prostatic portion, was an abscess, which, surrounding the pubis, was spread out behind the psoas muscle; having a second opening into the coxo-femoral articulation. This abscess originated from a spontaneous fracture of the descending and horizontal branches of the pubis, and histological examination demonstrated that osteo-sarcoma of the bone was the primary cause of the fracture.

Purulent Peritonitis. Umbilical Fistula.

At a recent meeting of the Société Médicale des Hôpitaux (July 22d), M. Legroux presented a patient just recovering after several months' illness. The patient at first presented all the signs of generalized acute peritonitis; shortly afterward a small tumor appeared at the umbilicus, a narrow opening or fistula soon formed, and large quantities of pus were evacuated. Finally, the quantity of pus gradually diminished and the patient completely recovered. M. Legroux, considering this case in connection with those reported by M. Fèrèol, is of opinion that this pus originated in the cavity of the peritoneum.

The seat of the fistula, exactly at the umbilicus, would seem to render this opinion probable, for in cases of phlegmon in the abdominal or pelvic cellular tissue the opening is at some point about the umbilicus, and not at the navel itself.

Generalized Hyperostosis.

MM. Leloir and Rathery, at a recent meeting of the Société de Biologie, (Aug. 6th), presented a patient, aged about 50 years, affected with symmetric and generalized hypertrophy of all the bones. This individual, exempt from any hereditary or acquired disease, had been employed in the lead works, but quitted that profession on account of palsy of the extensor muscles of the hand. After the siege of 1870 he had some œdema of the lower limbs; about one month later he found that his hat had become too small for the head, and during the two or three months

which followed he remarked an augmentation in volume of the bones of the leg.

At present he walks with difficulty; there is symmetric hypertrophy of the bones of the head, of the scapula, clavicle, ribs, femur, and tibia, without, however, much alteration in the general conformation of the bony skeleton.

As may be readily understood, this augmentation in volume of the bones of the cranium had induced cerebral troubles; the patient is in a state of intellectual torpor, the memory is much diminished, and the sight, hearing and smell also markedly affected, probably by strangulation of the nerves at their point of passage through the bones at the base of the cranium. Shooting pains (douleurs fulgurantes) are felt sometimes, and may possibly be due to pressure exercised on the spinal cord by the hypertrophied bones of the rachis.

There is not the slightest trace of softening of the bones; the urine is normal. M. Hanot opined that this patient belonged to the category described by Paget, affected with osteo-malacia, with bones of hard consistence.

On the Treatment of Cholelithiasis.

In a paper published in the *Western Medical Reporter*, for September, 1881, Dr. L. S. Oppenheimer, of Seymour, Indiana, says, that to relieve the patient of pain, he relies entirely on hot water fomentations and hypodermic injections of morphia with atropia. To cause expulsion of the stones he employs such remedies as have a soothing effect upon the duodenum and the bile duct outlets, viz., chloride of ammonium, carbonate of sodium, bicarbonate of potassium, and other alkalies of this class. Shortly after beginning to take these remedies he has known gall stones to be passed in quite a number of cases, and has seen other patients seemingly recover without passing any.

He believes that the succinate of iron is of some value as a solvent of gall-stones, and gives it in ten-grain doses three or four times daily, in peppermint water. The hygienic treatment he regards as one of the most important items in the management of the cases; and first of all as to food and drink.

The duodenum should not be allowed to perform more duty than is absolutely necessary. This is to be accomplished by abstaining, so far as possible from those foods that are digested here, such as starches, sugars and fats.

For the obstinate debilitating diarrhœa of these cases, he employs with great benefit a skim milk diet and opiates in the form of Dover's powders.

Whisky and Sunstroke.

Dr. Allison Maxwell observes, in the *American Practitioner*, that, while an interne in the Cincinnati Hospital, there were many cases of insolation brought to that institution, and it was a patent fact that most of the cases occurred in drinking men, and that the prognosis in drinkers was unfavorable. He also mentions the fact that in India, on the same day, Sir Charles Napier and forty-three other Europeans were prostrated from heat apoplexy. The forty-three died, and Sir Charles recovered, and explained his recovery by declaring that the sun found no ally of alcohol in his brain.

This, we believe, is the experience of every military surgeon in that country, and it is a noteworthy fact that among thousands of mariners who annually visit Calcutta, a proportionately much larger number of captains die from heat apoplexy than common sailors, although the latter are much more exposed, frequently working in the sun all day, while the former usually remain indoors, in cool apartments, or under double awnings.

This can only be explained by the fact that while, sailors go on an occasional spree, the captains regale themselves constantly with brandy and soda, in order to "neutralize the injurious effects of the climate."

A Plea for General Education on Subjects of Hygiene.

From an article on "Physical Culture and Mental Attainments," published in the *Sanitary News*, by Dr. J. G. Reed, we take the following:—

"Know thyself," is a law of holy writ as imperative as any mandate coming from that inspired source. The relative value of different kinds of knowledge is seen in instances in which adornment takes the place of usefulness, and modern notions of elegance supplant the convictions of duty and labor. A young lady of eighteen is master of several languages, can play all the instruments, from the piano to the harp, sing an opera with thrilling effect, rehearse the romances of the day, and faint in an astonishing manner, yet, when overtaken by sickness, how ridiculously ignorant she appears when she places her hand below her diaphragm to indicate the location of her lungs!

The remedy for our existing evils is education, and education of a kind which will put the peo-

ple in possession of a knowledge of the laws of life and of health, and that will enable the young lady of the world to know the difference between pneumonia and the stomach ache.

Hypodermic Injections of Morphia.

Dr. Dujardin-Beaumetz employs gr. xv of chlorhydrate of morphia dissolved in ℥ ij cherry-laurel water. He begins by injecting from five to ten milligrams in cases of lesions of the aorta (contraction or insufficiency), to relieve dyspnœa, attacks of angina, cardiac pain, and the symptoms of cerebral anæmia, such as vertigo and lipothymia. The injection may be made in the dorsal surface of the forearm, the walls of the abdomen, or, better still, in the vicinity of the pain. If the morphia is ill tolerated, and induces vomiting, the following solution may be used: Chlorhydrate of morphia, ten centigrams; neutral sulphate of atropia, one centigram; and cherry-laurel water, twenty grams. A gram of this contains half a centigram of morphia and half a milligram of atropia, and the whole syringeful may be injected. More favorable results are often obtained from this than from morphia alone. Before any of these injections are used, we should be certain that the kidneys act regularly.

The Treatment of Erysipelas.

Dr. W. Thackeray, of this city, says, in the *Therapeutic Gazette* for August, 1881, the idiopathic variety, which also includes the so-called phlegmonous, has proved in his hands a very tractable disease, and he has witnessed and treated some of the most distressing and violent attacks possible to occur. All that is necessary locally, says he, is to keep the parts affected well covered with a cloth wetted with a saturated solution of sodium chloride, and constitutionally to administer a refrigerant of citrate of magnesia, made extemporaneously, from the sulphate and lemon juice. This plan, with a light farinaceous diet, will cut short the most violent attack, and will leave the patient without the unsightly scars that remain as a sequel to the more energetic course generally adopted.

The Treatment of Lumbo-Abdominal Neuralgia.

Dr. Cheron summarizes as follows, in the *Revue des Maladies des Femmes*, the indications for the treatment of lumbo abdominal and lumbo-sacral neuralgia. The first step to be taken is to ascertain if this affection be in connection with a functional disturbance of the utero-ovarian apparatus, or with a diathetic affection of these organs. In the first case, the treatment of the uterine affection and the external spinal treatment will easily dispose of this neuralgia; but if it be in connection with a uterine affection of diathetic and constitutional origin, it will be indispensable to add to the local uterine and external spinal treatment a general treatment intended to attenuate the effects of the diathesis. If the case be one of a chlorotic patient, iron, manganese, and narcotics will be indispensable. Iodide of potassium, essence of turpentine, and quinine, are very useful in arthritic cases.

Cerebral Circulation.

A French physiologist, M. Gley, has made some delicate experiments on himself with regard to the effects of attention and intellectual work on cerebral circulation. His results confirm those of M. Mosso, and he has added some new observations. He finds that the rhythm of the heart, through intellectual work, is slightly accelerated; and this increase seems in direct ratio of the intensity of the attention. Thus, the pulse was more frequent when the author studied geometry, with which he had little familiarity, than when he studied philosophy, of which he had a good knowledge. While the heart-rhythm is accelerated, the carotid artery is dilated during cerebral work, and the carotidian pulse becomes dicrotic; but the radial pulse becomes smaller and less ample. The phenomena of congestion observed in the brain persist a certain time after cerebral activity.

Ovariotomy for the Cure of Dysmenorrhœa.

Dr. W. B. Rogers, of Memphis, Tenn., in a paper read before the Shelby County Medical Society, and published in the *Mississippi Valley Medical Monthly*, gives the history of three cases of dysmenorrhœa cured by the removal of diseased ovaries, after other modes of treatment had been exhausted. In the two first cases it was found necessary to extirpate both ovaries; in the third case, the right ovary, presenting no evidence of disease whatever, was left in situ. The result in each case was fairly good.

Smallpox Aborted by Vaccination.

Dr. E. J. Moseley, of Richmond, Va., reports, in the *Southern Clinic*, the case of a child in which vaccination performed after the eruption had appeared evidently modified the disease, converting it into a varioloid form, from which the child made a rapid recovery.

Special Reports.

NO. XVII.—THE LAWS OF MALPRACTICE.

(*Concluded from p.* 386.)

What constitutes negligence on the part of the physician is a question that may perhaps be answered differently at different times. Courts have taken different views of the question, but we may, as surgeons, look at the question in a little different light from what at times they may be disposed to adopt. Two very different decisions bearing on this interesting question have recently been given, in widely separated courts, yet it is a question whether one should have been held more highly responsible than the other, or whether they should both alike be judged from the same standpoint; the decision of the Massachusetts court involves certain novel points which may well be discussed and some deductions drawn,

The facts in one of the cases alluded to transpired in a city in Western Pennsylvania, the claimant suing for $10,000 damages, the doctor being mulcted in the sum of $2500; we are rather surprised at the smallness of the allowance made, from the fact that a doctor generally goes into court handicapped with the fact that juries, as a rule, are more disposed to switch a doctor, when they get the opportunity, from an idea that he must, no matter what the condition or circumstances involved, get a man, by some occult performance, into as good if not a better condition than he was before he fell into the clutches of the Æsculapian disciple who undertook to patch him up. So far as I can learn, the case turned on the compound question of the negligence, incompetence, and lack of surgical knowledge of the gentleman who fell a victim to the lawsuit instituted against him.

A boy, about 10 or 12 years of age, sustained a fracture of the bones of the forearm; the family physician being called in set the arm, placing it in splints and bandaging it; this was in the morning: in the afternoon a relation of the boy repaired to the doctor's office and informed him that the patient was complaining of pain, numbness and swelling in the limb, and that the fingers, where they protruded from the end of the splint were blue and cold. The doctor, instead of calling upon and examining the patient, simply remarked that "it was all right, and that he would be around the next day." Unfortunately, when he called, at noon the next day, irreparable damage had been done, complications set in, the final result being that, after a prolonged period, the case gradually going from bad to worse, the patient was discharged with a deformed and paralyzed arm, the result of pressure due to tight bandaging, seconded by subsequent inattention. The court held that the doctor had been criminally negligent in not paying immediate and sufficient attention when summoned in the afternoon, and that he should have had such a knowledge of the evil effects of tight bandaging as to put him on his guard against such deplorable consequences.

If the facts are as represented there can be no question as to the correctness of the holding of the court, for most certainly we all know that a fracture, no matter where, is apt to be followed by a greater or less amount of swelling, that up to a certain period this tendency of the swelling is rather to increase than decrease, that bandages placed upon a recently fractured bone must be watched narrowly and carefully, and applied with a great degree of skill and judgment, a sufficient margin always being allowed for subsequent swelling. Supposing that the surgeon, instead of practicing in a large city, in close proximity to the hospitals and seats of medical learning which always abound in these centres, should have been a country practitioner, remote from such advantages as are generally conferred upon a metropolitan practitioner, how would the law as recently interpreted affect him. A case of malpractice, involving the point at issue, namely, the measure of responsibility of surgeons, was decided on appeal, during the past winter, by the Massachusetts Supreme Court.

The Bench handed down an opinion, the following extract from which is of importance alike to the city and country practitioner:—

"A country surgeon is not bound to the exercise of that high degree of art and skill possessed by eminent surgeons living in large cities, and making a *specialty* of the practice of surgery, but only to that reasonable degree of learning, art, and skill ordinarily possessed by others of his profession, having regard to the advanced state of the science."

While on its face such a decision may seem to be eminently right, yet we may debate whether its provisions will altogether be accepted as just by the profession. It is evident that a city doctor does, theoretically, enjoy greater privileges than his country confrère, but we must take certain provisos into account in making up our opinion. In the first place, taking practice for practice, the country practitioner will see more general surgical practice than his city brother, for in the large towns the great majority of acute and even chronic surgery finds its way to the wards of one or the other of the large hospitals, thus taking the case out of the province of private practice, and throwing it into the domain of the few surgeons who may happen to be connected with the institution; whereas, on the contrary, hospitals, etc., not being so convenient in country dis-

tricts, the cases must inevitably fall to the care of the local doctors, thus *compelling them to acquire and employ that* practical working knowledge which is said to constitute three-fourths of a good medical education. Then again, many medical gentlemen in the city have no taste for and less practice in surgery, general or special, and though the court may hold that their near ness to the sources from which the most recent knowledge may be obtained shall hold them to a higher responsibility, yet the fact exists that, either through lack of time, or, as I have said, of a penchant for surgical knowledge and practice, they do not avail themselves of the opportunities presented; and, even granting that they should so desire, it is evident that they cannot be in constant attendance upon clinics, lectures, etc., but that they must rely, for what knowledge they get, upon exactly the same sources as those practicing in the country, to wit, books, magazines, society meetings, and the various publications and monographs issued by such societies and by individuals. Of course, one may say that the court held that he in the country is not as responsible as *eminent surgeons making a specialty;* but the question then arises as to what constitutes *eminence*, where the line shall be drawn, and what comprises "making a specialty," for, as we know, while one may, as *we* suppose, be eminent, to others he may seem and be almost unknown, or at least as occupying a very decidedly middle ground in the profession; and at the same time those who make a specialty and practice no other branch or branches, are decidedly in the extreme minimum, if we may so say. If the rule of eminence is to hold, then to be eminent is to hold one's self liable to a great many unfortunate chances, for it is a well known fact that there exists a class of society who are ever ready to pounce down upon a surgeon who seems to be blessed with a little of the world's goods, to compel him to disgorge for the benefit of the patient, who, perhaps, has made as good a recovery as possible, but who has been urged on by interested friends to enter suit against the doctor. We have even heard of a case where such a suit was threatened, where it was proved that the bandages were systematically loosened after the daily dressing had been made by the surgeon; and in suits for malpractice it might be a good question to ask a witness as to how much bandage practice the patient, or his friends for him, had instituted; the plea in the case we refer to was that the bandages were a little tight and inconvenient. Other questions will, of course, occur to the mind of the practitioner in connection with this decision of the Court, but we will not discuss them here, but pass on to another decision recently rendered, and which is decidedly novel in the annals of medical jurisprudence, in at least so far as I have been able to discover. The trial took place in Michigan, of a case involving these points:—

A physician was engaged and attended a lady in confinement; upon being called to attend her he took with him a friend, who was neither a doctor nor student, but who he said was to be his assistant, in case he needed one. As the case turned out, unfortunately for him, he did need assistance, which was rendered by the individual referred to; the family at no time raising any question or objection, presuming, probably, that the one assisting was engaged either in practice or as a medical student, although at no time did the attending physician so designate or address him. However, the lady was safely delivered and everything, seemingly, was pursuing the tenor of its way, when our friend suddenly awoke to the unhappy realization that he was the defendant in a lawsuit instituted against him, for having made an indecent and unprofessional exposure of his patient, in introducing at such an interesting time a person who manifestly wished simply to gratify a morbid curiosity. The court sustained the point, holding that the physician had committed a breach of those proprieties usually observed by physicians towards their patients, and that a shock had been given to the sensibilities and modesty of the lady in question, which the accoucheur should have been particularly careful not to have administered, and that a sacred confidence, which should have been respected, had been betrayed by the action of the doctor, in thus introducing a stranger, and allowing him the privileges which the necessities of such cases confer upon the attending physician.

It must, indeed, have been a highly enjoyable position for all hands to have occupied in court; we should imagine decidedly serio-comic.

Another question remains to be discussed, upon which I have not been able to obtain any decisions. A physician or surgeon having attended a patient as a charity, and for which he receives no compensation, should he be liable in damages for any unfortunate results, or any lack of knowledge on his part? This question is one of more special importance to the younger men of the profession, who are engaged in so much of that practice the reward for which we are taught and supposed to believe will be given in heaven. It rather seems that he should not be held so responsible, for the reason that one accepting charitable services does so, generally, with the tacit understanding and knowledge that he is not getting the results of the ripe experience of the individual treating him, but that he is serving as a species of clinical patient, upon whom the

physician or surgeon is privileged to practice such experiments as shall not endanger the life, nor interfere, so far as the doctor is aware or believes, with the future usefulness of the individual: the doctor, in return for these concessions, agreeing to attend the patient without charge for services rendered; the position is of course tenable that a man who practices, no matter whether he receives pay or not, assumes to be able to properly manage any given case, and, consequently, is accountable for results to the individual; still, at the same time, no value being given no value should be expected in return, may also be said to hold. Of course, the proposition may be advanced that the fact of his serving as a clinical patient is, in a manner, compensation, and value for services rendered, and, as a consequence, the one so allowing himself to be used does so with the understanding that he who accepts him as such must bear the responsibility of any unfortunate contrêtemps; even admitting that this view of the question might be advanced, we greatly doubt if a court would sustain it as against the physician; still it would not be safe to rely upon the court taking a view of the case in favor of the defendant, for he has against him that natural sympathy which is generally felt for unfortunates suffering under physical disabilities, backed by the fact that, as a rule, charitable patients are regarded by the general public as suffering great negligence at the hands of those of the profession into whose care they may fall, which supposed fact is not a fact, but a very shallow and gauzy theory, the fallacy of which is demonstrated by the vigor with which such cases are hunted up and held on to, in order to swell the yearly list of patients at the different hospitals and dispensaries; and to retain them they must of necessity be well cared for, though even then at times they bite the hand that strives to bring them succor.

G. F. Souwers, M.D.

Correspondence.

Facilities for Obtaining Poisonous Drugs.

Ed. Med. and Surg. Reporter:—

Recently, I was called upon to attend a case of poisoning in a young man who had failed, some short while back, in his efforts to graduate from a medical school he had been attending. He had on this occasion taken several grains of morphia sulphate, and it required hard work to revive him. His statement after recovery was to the effect that he had taken one-third of a package containing fifteen grains of sulphate of morphia, in mistake for one containing only a fourth of a grain. That such a mistake was made without intent, I could hardly credit. In the endeavor to investigate further into my patient's reasons for taking so large a quantity of the drug, I have been enabled, aided considerably by discoveries made by a physician in another city, under whose charge he now is, to find that he has been, and is, a prey to the morphia habit. Large quantities of morphia and chloral hydrate have been found upon him; the explanations he gives have been entirely unsatisfactory and contradictory. At one time he procured from a drug store fifteen grains of the sulphate of morphia combined with two drachms of subnitrate of bismuth. This was obtained on the presentation of an order in the shape of a prescription, and signed by himself. On another occasion, and in the same manner, he purchased two drachms of chloral hydrate from the same druggist. Though it was represented that these drugs were wanted for patients some distance away, there is now no doubt but that he wished them for his own use.

This and other cases of which I have had direct knowledge urge me to crave space in your columns, that attention might be pointed to the too free sale by druggists of that class of drugs, in which are included morphine, chloral hydrate and others. Sufficient restrictions are wanting in the sale of drugs of this and a poisonous nature. Any one, it seems, possessed of the ability to write, and of a knowledge of the names of medicines, can write a prescription, have it presented at the counter of a druggist, and secure its being filled, without question or hindrance. The case I have just cited is an example, showing full well how easily a man not a graduated physician, but presenting himself as such, was enabled to obtain poisonous drugs.

I know of an ex druggist who, whenever he wishes medicine for his family, writes a prescription in the regular orthodox manner, and sends or takes it to the druggist, who compounds it, and files the order away among those from *legalized practitioners*.

When a student, in my first year, I wished to experiment with cantharides upon a male cat, having heard that the drug was an aphrodisiac used extensively by young men and women. I desired to test its powers, for I doubted if it had any such properties. I accordingly stepped into a drug store for the purpose of buying some of the tincture. "We cannot sell it without a prescription," replied the apothecary, to my application. "But I am a medical student," I rejoined, "and wish the cantharides for experimentation." "I cannot help it, I must have a prescription," was all the answer he would deign me. "Very well," said I, "here is a prescription; now fill it up." While speaking, I had hastily scrawled off a prescription, signing my own name, which I handed to the druggist. I have only to say that I secured my Spanish-fly, but, in its use on the cat, the only result I obtained was to nearly poison the poor thing.

And so in a like manner, can anybody, so disposed, no matter with what intent, be it good or bad, secure medicines from the druggist or pharmacist. There is no particular harm done when the medicines ordered are of a simple or unharmful nature; but too often they are not such, and are used for no good purpose.

Slaves to opium in its various forms, chloral

hydrate, chloroform, arsenic, etc., have, therefore, no slight temptation thrown in their way to procure frequently and in large quantities, the drugs they crave. Laudanum drinkers are constant visitors to the drug store; and when told by the conscientious druggist that laudanum can only be procured on presentation of a prescription from a physician, the customer soon finds the means and knowledge whereby to write one, signing either his own or some fictitious, or some physician's name. Presented at the counter, the druggist fills the prescription up, and justifies himself in the act, because either he imagines he is safe in the possession of the recipe, or that he has no right to throw doubt or suspicion upon the genuineness of an order purporting to be from a physician.

My patient has procured, at various times, great quantities of morphia from druggists, within the past few months, and, no doubt, has consumed all he has purchased. Symptoms of a very alarming nature have repeatedly manifested themselves; but until lately they baffled, in respect to their cause, the physicians under whom he had been.

Physicians of any extended practice could, most probably, relate instance following instance, in which victims to the morphine habit have been enabled to keep the habit up through the aid of forged prescriptions.

I trust that I have clearly stated the matter. No argument is needed to substantiate my statement that druggists are called upon very frequently—alas! too often, indeed—to fill bogus orders for poisonous or other deleterious drugs. Every druggist will concede this to be a fact; we must admit that it is an evil. I find no direct fault with the druggist in this connection, for I know what his answer is, namely, "what right have I to question as to whether a prescription is or is not genuine?"

But there should be, if there is not already, a provision in law by which the druggist shall be governed in the filling up of prescriptions. It has suggested itself to me that the difficulty might be partially met by some such arrangement as this: A book to be furnished every pharmacist, in which there shall be printed the name of every legalized physician. Pharmacists shall fill up no prescription not over the signature of some one therein named. Of course, in glancing over the effects of such a plan, so many valid objections are discovered, that at once I see it would not fully answer.

A plan which will be *practicable is demanded*, for the safety of the people. This slavery to opiates is assuming frightful proportions. A blow calculated to crush it, more effective, possibly, than any other yet suggested, would be found in some such law as would prevent absolutely the sale of such drugs to the people.

It is rare that a bogus check or money order is paid without its nature being discovered; why, then, should there not be the same circumspection exercised over the nature of prescriptions?

G. Maxwell Christine, M.D.
1105 *Diamond St., Phila.*

Addendum.—Just as I was about to mail the above, my attention was called to an article published a day or so ago, in one of the Philadelphia newspapers. This article, an editorial, was headed "The Opium Habit." It sums up the conclusions arrived at by a writer in the September number of the *Catholic World*. Let me quote: "The number of opium eaters in the United States is estimated at a quarter of a million, fully four-fifths of whom are women. The increase in the use of the drug in the city of Albany, N. Y., is a fair sample of the spread of the habit. Twenty-five years ago, with a population of 57,000, the annual sales of opium in Albany amounted only to 350 pounds and 375 ounces of morphia. Now, with a population of 91,000, 3500 pounds of opium and 5500 ounces of morphia are sold annually in that city. It is true that much of these drugs is sold for medicinal use, but the suggestive fact remains, that the increase in the population of Albany has been but .59, while the increase in the sale of opium has been 900 per cent. and of morphia, 1, 100 per cent. * * * There is force in the writer's suggestion, that it is time to regulate and limit the sales of opium by legislative enactment. 'Let it alone' and he fears 'That opium may, ere many years, be used as extensively in America as in China.'" These conclusions are interesting, and should demand the strictest attention of those interested in the welfare of the human race.

G. M. C.

Practical Ethics.

Ed. Med. and Surg. Reporter:—

In the number of the Reporter, September 3d, appears an editorial headed "Practical Ethics in the Profession." In that article you detail parts of two conversations; one had with a merchant, the other with a physician, bearing upon the questions discussed, and you close the article with the remark, "It did not seem worth while to object that his experience (referring to the physician) had been as unusual as it was unfortunate, etc. * * * We prefer to leave the matter for our readers to think over, just as he put it."

As one of those readers, I have, in the thirty years I have practiced medicine, thought the matter over thousands of times, just as your friend put it, and I wish here to confirm the truth of every word he uttered, as verified in my experience.

Lamentable as may be the fact, yet fact it is, your friend "*put it*" exactly right. Your manufacturer says "I have dealt with many classes of men, but with none as unreliable as physicians; they respect their promises less, and they keep their engagements more negligently." Your friend explains the cause for this, gives the reason, truly, but, as I think, applies it wrongly. "How, he says, can a man help becoming callous to his obligations to others, when he is thus treated year after year?"

From this it might readily be inferred that the doctor (and I mean more particularly the country doctor) becomes intentionally, from principle, *dishonest*; that he contracts a debt, not intending at the time to pay it, or, if you choose, *knowing* at the time he cannot pay it. Now, I do not believe this. But he is doing a good (as the word goes) practice; booking, perhaps, from $100

to $300 a month, aggregating in the year $2000 or even $3000, perhaps. He expects his money; has worked hard, and has a right to expect his pay; but the end of the year comes, and as your friend says, "his bill is the last paid," and as is far too frequently the case, it is not paid at all; the debtor has paid out all the money his short crop brought, before he gets round to the doctor. The result is, of course, that he, the doctor, cannot pay the debts he had contracted. He had intended, honestly intended, to pay, but cannot, from the very necessity of the case. He is not "callous," he has not become defiled, though he has for years rubbed against filth.

"A mon may hae an honest heart,
Though poortith hourly stare him."

After working hard all the year, in rain and shine, day and night, the year closes upon the poor, spirit-broken, country doctor, with not even a comfortable living for his family, not even "a Sunday suit" for himself, or a "new calico dress" for his wife, while his children go in patches; and at the same time, there are on his books, due and overdue, thousands of dollars in accounts, and in his note case hundreds of worthless promises to pay, upon none of which he can by law force collections.

Such, sir, I venture to assert, is the experience of three-fourths of the doctors in the country, were it faithfully given, and they become unreliable because they cannot help themselves. Nearly every utterance of your friend is true to the letter. I, like him, am "one of those who call things by their names, and use words not to darken knowledge, but to let his hearers know his opinions." Well, is there no remedy? *I* can see none, save in *time*. The elevation of the standard of medicine, the *extinguishment*, not suppression, of quackery and charlatanism by the strong arm of the law, and the education of the masses, may in time accomplish it.

Doctors must themselves quit backbiting, and by innuendo, slandering each other, and agree to work together for each other's good, as well as for the good of the people. *Self* must not rule all the time.

Perhaps the day will come when a different state of things from the present may obtain, but I doubt exceedingly, if either you, or your friend, or I, will live to see it. VERITAS.

The Erythroxylon Coca.

ED. MED. AND SURG. REPORTER:—

You may remember what wonderful benefit I derived from the use of fluid extract of coca last spring, while under your observation. I was suffering from anæmia, shortness of breath, and general nervous prostration. Shortly after commencing the use of coca I noticed a decided improvement in my case, and this has continued with its use, so that now I am able to go about and walk reasonable distances without suffering from weakness or shortness of breath. Under the circumstances it is pardonable if I feel a good deal of gratitude to the coca.

For nearly forty years my mother has been afflicted with periodic attacks of asthma, which are particularly troublesome in spring and early fall, September being the month during which she chiefly suffers. Almost every remedy has been tried by her, but without any benefit. Last week she was suffering even more than usual. She could hardly draw her breath, she was in a bath of cold perspiration, and her pulse was running at over 120. I prevailed upon her to take a little coca, half a teaspoonful in about a tablespoonful of water. The effect was truly surprising. In less than half an hour she was able to leave her chair. The pulse was natural and the breathing free. Since then, each afternoon when the attack comes on the same quantity of coca effectually checks it. Indeed, I really believe if I could prevail upon mother to take the coca oftener the attacks would not again show themselves, but she is so afraid the remedy will lose its effects (as remedies frequently have done in her case) that she only takes it when the attack manifests itself.

I have recommended the coca to two other asthma victims in the neighborhood, and in both cases decided relief has followed.

It is, of course, impossible to say, from these few examples, that coca is a specific in such cases, but it certainly seems worth while to give it a trial, as, if it does no good, I do not believe it can do any harm.

I thought the foregoing might interest some of your readers, hence I forward it you.

Exton, Pa. C. H. POIZAT.

[The above extract from a letter of a very intelligent gentleman will be welcome as a contribution to the therapeutic effects of the coca, about which such great diversity of opinion exists. —ED. REPORTER.]

The Horse Fever.

ED. MED. AND SURG. REPORTER:—

In this locality a new epizoötic is prevailing. It has gone through all the large stables, and is attacking isolated horses, and has also extended widely among the farmers of the county. It has produced considerable mortality. The doctor's horse, in a country practice, is his constant companion, and becomes almost as dear to him as one of his family; therefore, when my equine became sick I watched him with the same solicitude that I did any other patient.

On the morning of Aug. 14th I found one of his hind feet swollen and quite tender; attributed it to a scratch received several days before, and let him remain in the stable. In the afternoon his eyes were dull and filled with a muco purulent discharge; this also appeared in his nostrils. The next morning the discharge was profuse; both hind legs were swollen; refused his food, and seemed to swallow water with an effort; it did not seem on account of swollen glands as much as from a difficulty of deglutition and stiffness of the jaws; gave him a small apple, which he dropped, because he could not get it between his grinders. Using my fever thermometer, I found his temperature 105°; led him into the lawn in front of the house where there was some tender grass; he seemed to put his head to the ground with difficulty, and after trying it a few

times desisted, and walked to me for sympathy, lifting his hind feet with difficulty and looking dejected. His bowels were loose and his water free. Having a bottle of fl. ext. of verat. virid. in my pocket, it occurred to me to try it, which I did, for the fever. I poured two drachms into some water, which he drank in a little time, with frequent sips; it cooled the fever sensibly. The next morning the fever was as high as the day before; gave the verat. vir. in the same dose, several times during the day; he took no food but quite a quantity of water; he had evidently stood up all night, and, in fact, did so for several days and nights afterwards; the discharge from the eyes and nose became copious.

The fever was less the third morning; thermometer marking 100°; the stiffness seemed passing away, and he tasted grass and took a few oats. He did not eat very freely before the fifth or sixth day, or lie down. The discharge then ceased, the swelling disappeared, and he walked with no difficulty. He had lost flesh very markedly, and for ten days after seemed to be weak and sweat profusely when exercised. It is evidently a contagious, self limited fever, its period of incubation, from five to eight days, and it runs its course in about five days, having a period of high fever for three days. In some instances there was much swelling of the parotids, but no cough; the jaws became very stiff, and deglutition so difficult that in some cases no fluid could be swallowed for three or four days. The fever sometimes seemed to produce delirium, as the horse would dash its head wildly about, and require restraint to prevent injury. In some cases death occurred from swelling about the throat, but in most cases it happened in the height of the fever, or when exercised too soon after it was over, or during convalescence. In all cases where the stereotype horse remedies were used, bleeding or purging, death or prolonged convalescence resulted. Young and old take it, but debility and disease, of course, added to its fatality. There is no exemption in any stable or collection of horses, but some that are isolated with care have escaped it. On farms it seems to be general. It has appeared in various parts of the State, and seems to be spreading widely. The mortality is very small, and the best treatment the expectant one, or a careful letting alone. In my case, I have no doubt the fever was modified by the ver. virid., which, if not curative decreased the suffering of the animal.

Clinton, Iowa. P. J. Farnsworth, M.D.

The Treatment of Rheumatism by Collodion.

Ed. Med. and Surg. Reporter:—

Rheumatism is one of those affections that has called out nearly, if not all of the materia medica list, and with but partial success. Quite recently salicin or salicylic acid has been extolled and almost entered the list of specifics, and yet with how many failures. This empiricism has led the profession to rush headlong from one thing to the other, in the hope of allaying the sufferings of the rheumatic patient. The bandaging of the rheumatic limb has always given more or less relief, and it has thus been suggested that collodion would answer a far better purpose, in holding the parts firmly together, and besides allow a certain degree of elasticity. What the physiological conditions of rheumatism are is not our province to discuss here. Each one generally makes his own inferences; and so it is with the process of eliminating this substance. Medicine, after all, is successful only after an empirical use is made of agents as applied to the morbid parts. If the application of collodion succeeds in giving entire relief to the rheumatic joint. it matters little to the profession what the physiological action is; that can be investigated afterwards; and yet the truth of this investigation will be obtained by accident more frequently than otherwise.

Some years ago we applied collodion to a rheumatic joint, which gave relief; but it was not applied with the object of giving relief *per se*, but only as a better substitute for the bandage, which annoyed the patient much, from a hyperæsthetic condition of the part. And so this application had disappeared from memory until exhausted with a couple of cases that medicine would give no relief to in the least. Feeling like the young student, who is willing to try most anything and stand back and watch results, we again tried the collodion to the wrist and knee of a dropsical lady sufferer. It gave relief, but formed considerable tumefaction in the hand and foot; to these a close-fitting bandage was applied and all trouble ceased. And after continuing this for two weeks, it was removed without any further trouble. It was kept on for two weeks, because then it was supposed that the affection had spent its force after the usual length of time. The second, Mrs. M., a lady of fine physique and good health, had rheumatism of the ankles, especially of the left and knee. In the second week of the affection collodion was applied, and kept on for four weeks, all the while giving entire relief. When it was cleared away all traces of the affection had disappeared. The caoutchouc collodion was used, on account of its elastic and contractile properties.

Detroit, Mich. E. E. Riopel, A.M., M.D.

News and Miscellany.

Vitality of Infants.

Some statistics on this subject have recently been published by Baron Kolb, of Germany. Out of 100 children nursed by their mothers, only 18.2 died during the first year; of those nursed by wet-nurses, 29.33 died; of those artificially fed, 60 died; of those brought up in institutions, 80 died in the 100. Taking 1000 well-to-do persons and another 1000 of poor persons, after five years there remained of the prosperous, 943; of the poor only 655. After fifty years there remained of the prosperous 557; of the poor, 283; at seventy years of age there remained 235 of the prosperous, and of the poor only 65. The average length of life among the well-to-do was fifty years, among the poor, thirty-two years.

These comparative figures are very greatly at variance with general impressions. Most persons are impressed with the idea that the poor are, as a general thing, longer-lived than the wealthy, but Baron Kolb, if his statistics are reliable, and

it is claimed they are, wholly overturns that belief. The author furnishes some reasons for the marked difference in point of vitality of the two classes, prominent among which is "the anxiety of providing for bare subsistence, and the lack of proper sanitary conditions, as well as the lack of abundance of such food and clothing as are needed to sustain the body properly."

Ophthalmology: Middlemore Fund Prize Essay.

The interest on the fund of £500 given in trust to the British Medical Association by Mr. Richard Middlemore, of Birmingham, to found a prize for the best essay on Ophthalmology, having accumulated for three years, the Committee of Council now offer, in accordance with the terms of the trust deed, a prize of £50 for the best essay on the Scientific and Practical Value of Improvements in Ophthalmological Medicine and Surgery made or published during the past three years. The successful essay will be the property of the Association. Essays must be in English or accompanied by an English translation, and forwarded under cover, with a sealed envelope bearing the motto of the essay, and containing the name and address of the author, addressed to the General Secretary of the British Medical Association, 161A, Strand, London, and must be in his hands on or before May 31st, 1882. The concurrence is open to American writers.

Baltimore Medical College.

The first announcement of the Baltimore Medical College is before us. It states that it appears in "no spirit of opposition to other schools, but rather to encourage and stimulate them to increased efficiency. It will seek to elevate the standard of medical education, professionally and morally, and covets the reputation of becoming a practical Christian Medical School."

The following are the faculty:—Harvey L. Byrd, M.D., President and Professor of Obstetrics and Diseases of Women and Children; W. Robert Monroe, M.D., Professor of Materia Medica, Therapeutics and Hygiene, Dean; Benjamin F. Leonard, M.D., Professor of Physiology and Clinical Professor of Diseases of the Rectum; Henry Froehling, M.D., Professor of Chemistry, Toxicology and Medical Jurisprudence; L. Wheaton Clapp, M.D., Professor of Principles and Practice of Medicine; John R. Uhler, M.D., Professor of Principles and Practice of Surgery and Physical Medicine; L. Robert Coates, M.D., Professor of General, Descriptive and Surgical Anatomy; Adolph G. Hoen, M.D., Lecturer on Histology.

Philadelphia College of Pharmacy.

Since the close of the last session of the School of Pharmacy, finding that the building was not large enough to accommodate the rapid growth in the size of the classes, the properties in the rear of the building were purchased, plans matured, and the present addition erected, which as doubled the capacity of the College. The new building will give ample accommodation on the first floor for a Chemical Laboratory, more than double the size of the one it replaces, and thoroughly equipped in every particular. The second floor has been set apart as a Pharmaceutical Laboratory, in which instructions in Practical Pharmacy will be given. The third floor will be used as a separate lecture room for the Professor of Chemistry. This arrangement permits each Professor to have his own room, and better means are thus afforded for more complete illustrations of the lectures. The fourth floor will be used as meeting rooms for the Quiz Classes and College Societies.

The Museum of the College has also been enlarged; making a room 54x43 feet, which will give ample room for the display of the several valuable collections of East Indian, Japanese and Australian drugs, in addition to the present large collection of indigenous and foreign drugs.

Origin of Yellow Fever.

The following dispatch is clipped from the N. O. *Times* of Sunday, September 11:—

A dispatch from Guernsey announces the arrival there of the brig Monarch, from Mobile, with one of the crew dead and three sick of yellow fever. Our readers will accept this as strong evidence of the correctness of Dr. Hargis' theory that yellow fever originates in the holds of vessels. This ship could not possibly have become tainted at Mobile, for we all know that port has been perfectly healthy.

QUERIES AND REPLIES.

Dr. O. M. R., of Pa.—Because at that date the charter of the Eclectic College was annulled by Act of Legislature.

Mr. Editor: Correspondent wishes to know the dose of tr. staphisagria. Gtt. ij every four hours.

Dr. B. B. G., of Tenn., will find to his patient's comfort and relief, according to my experience, to apply the following ung. twice daily, wearing gloves. Keep the hands out of dish water and from the heat; wash with sulphur soap:—

℞. Ung. picis, ℥ij
Hyd. ox. rubrum, grs. xxx. M.
Ft. ung.

Wil., Del. J. T. V. BLOCKSOM, M.D

Newdegate.—1. The use of the title Professor should properly be limited to those who have been formally elected to that position in chartered faculties; but there is no law to prevent anybody calling himself Professor in this country. 2. There is no impropriety in a properly qualified Professor using the title on his cards, though, in medical circles, it is not considered exactly "good form."

MARRIAGES.

DUNLAP—EVANS.—On September 7th, 1881, by Rev. Charles Nagle, at the Moravian Church, Litiz, Pa., Dr. J. Francis Dunlap, of Manheim, Pa., and Miss Anna V. Evans, of Litiz, Pa.

THE

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Original Department.

Lecture.

HEMORRHAGE FROM THE BOWELS IN TYPHOID FEVER.

A Clinical Lecture delivered at the Hospital of the University of Pennsylvania, Sept. 13th, 1881,

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Reported by Wm. H. Morrison, M.D.

Gentlemen:—I have brought before you, this morning, a specimen and a patient; both illustrating the same condition.

This specimen was taken from the body of a patient who had died from hemorrhage from the bowels in typhoid fever. The patient who is now before you has also suffered from severe hemorrhage from the bowels, but has greatly improved.

There are a great many questions of practical importance connected with this subject, and I think that I cannot do better, to-day, than show you this specimen and this patient, and make a few practical remarks upon the subject of intestinal hemorrhage in typhoid fever.

It is a common enough complication of typhoid fever. I shall try to indicate the various sources of the bleeding, the relative gravity of the different cases, and the proper treatment.

First, let me give you the history of the case from which this specimen was taken:—

The patient was a lawyer, ambitious, and working hard at his profession; probably about twenty-five years of age. He began to feel badly about the 20th of August, but refused to give up his work. About August 28th he became so ill that he finally was obliged to take to his bed. The disease had lasted at least ten or fourteen days before he gave up. About the fourth or fifth day after going to bed, perhaps on the third, his temperature was as high as 104°. About a week after giving up work he began to bleed from the bowel, and from this time until his death the bleeding continued, despite all that was done by his medical attendant. The blood flowed from him steadily; any movement, or any attempt to swallow, would be followed by sudden ejection of blood. This continued for about four days.

Having just returned to the city, I was asked to see him in consultation, but reached the house about half an hour after he had died.

The next day we made the autopsy. The spleen was very much enlarged. It was not less than four times as large as natural, and must have weighed a pound and a half or two pounds. This enlargement of the spleen is a constant accompaniment of typhoid fever. Whenever we have a disease of this kind, that is, one in which there is a poison in the blood, we find that the spleen undergoes enlargement; but in typhoid fever there appears to be a special element causing enlargement of the spleen. It may be that the extensive lesion of the intestine has something to do with it.

We also found the mesenteric glands much enlarged in this case. I will show you a few of them now. In health they are hardly larger than a split pea, and almost invisible. Here are three or four, enlarged, and making a lump as large as a pigeon's egg. On cutting them open we found them pink in color and softened.

Enlargement of the mesenteric glands is, then, the second anatomical peculiarity in typhoid fever. This is directly connected with the in-

flammation of the glands of the mucous membrane. The degree of enlargement of the mesenteric glands is directly proportional to the severity of the lesions in the intestine.

A third constant lesion in this disease is enlargement and ulceration of the glands of Peyer, that is, the agminated glands, arranged in patches along the ileum, and most numerous near the ileo-cæcal valve; the solitary follicles are also enlarged.

In this specimen the enlargement of the solitary follicle is not great. I here show you (indicating on the specimen) a circular ulcer with thickened lips. That is a very characteristic ulcer of typhoid fever. It is small; it is seated in a Peyer's patch. The whole thickness of the mucous membrane has been cast off as a slough. Such an ulcer could not appear before the third week of the disease. The ulceration has gone through the submucous layer, but it was not from this ulcer that the greater hemorrhage came. The source of the hemorrhage was this sloughing, gangrenous ulcer I now show you. It was covered with a mass of soft, pulpy, almost gangrenous tissue, which was readily removed by a stream of water. There was no tendency to limitation of the ulcer. It spread around the whole circumference of the bowel.

This severe bleeding had not been caused by a vessel being opened by the ulceration, but was due to the leaking from the numerous distended vessels in this sloughing ulcer.

There are several superficial ulcers in the cæcum. The ileo-cæcal valve is much thickened, and would, of course, offer great obstruction to the passage of matter into the large intestine. The whole colon was filled with blood and completely distended.

Let us now study the patient before us. I will give you his history. He is a Frenchman, age 24 years. He has been in this country three months. Let me say here that typhoid is very common in new comers. Visitors to Paris and those who go from this country to reside there constantly get typhoid fever. The disease is perhaps more common in Paris than in any other centre in the world. The patient has been out of health ever since leaving France. The present illness, he says, began about August 30th. To day would, then, be about the fourteenth or fifteenth day of the disease, but I presume that the disease began earlier than the date he gives us. The trouble began with pain in the back, loss of appetite, bleeding of the nose, looseness of the bowels and great weakness. The ordinary early symptoms of typhoid fever.

He was admitted to the hospital on September 1st, at which time his mind was dull, he was disposed to sleep, answered questions with difficulty or not at all. The tongue was coated with a yellowish-white fur, swollen, and marked by the teeth. The temperature was 103°, pulse 100, and respirations 24.

He was confined absolutely to bed. He was given for food merely milk reduced with water.

On the third, the condition of mind was unchanged. The tongue was dryer and browner, from breathing through the mouth. He had two soft passages.

4th. No noticeable change; bowels moved twice; stools fetid.

5th. Very dull; headache continues. He complains of uneasiness and distress in the bowels. Bowels not moved. At this time he was placed, by Dr. Dunn, on a pill containing—

℞.	Argenti nitratis,	gr. ¼
	Pulv. opii,	gr. ½.

This was given three times a day. This was given with the certain knowledge that the man was passing into a state of advanced ulceration of the glands of Peyer and of the solitary follicles. It was given to modify favorably this ulceration and possibly prevent some of the swollen glands from going on to ulceration.

6th. The condition was unchanged at the morning examination. One spot of eruption was observed. In the afternoon of the sixth he had a large hemorrhage from the bowel. About twelve ounces of blood were passed. There was also some fecal matter with the blood. He complained of some pain and tenderness and distention of the bowel. The pulse fell twelve beats, and the temperature fell one degree.

He was then ordered—

℞.	Vini ergotæ,	ʒ ss
	Tinct. opii,	gtt. xv.

to be repeated every half hour, until four doses were taken. The pills of silver and opium were given more frequently. The milk and water (two parts milk and one of water) was also continued.

7th. The next day the bowels moved once. There were a few clots of blood; abdomen still tympanitic; mind clearer.

8th. Headache and all pain has ceased; rested poorly; tongue foul and coated; dark in the centre and yellow toward the sides; two movements of the bowel, which were thin, fetid, yellowish or ochre colored, and attended with a little pain; some tympanitis; more eruption.

9th No marked change; less tympanitis; two yellow stools; no blood.

11th. Condition about the same; three passages, but no blood.

On the morning of the sixth the pulse was 112; respirations 27, and temperature 102°. After the hemorrhage, pulse 102; respirations 23; temperature 101°. Since then the temperature has fluctuated. This morning it is 104°.

This man is, I think, in about the third week of the disease. He has been very sick. He has had a large hemorrhage; a temperature of 104°; pulse of 112; respiration rate of 27, with a tendency to diarrhœa, and marked nervous symptoms. His treatment has been very simple. He has not had a drop of stimulus of any kind. For food he has taken nothing but milk and water. He has received three or four doses of ergot and the pills of nitrate of silver and opium. For the relief of the tympanitis, turpentine stupes were employed.

Let us now consider the causes of hemorrhage. You will observe in a certain proportion of cases that bleeding occurs early, say about the eighth or tenth day. Such hemorrhages are small, and have, as far as I have seen, no serious significance. They have seemed to me to be due to the intense congestion of the large bowel, and occasionally they have come from the engorged hemorrhoidal veins in the rectum. I have seen these small hemorrhages occurring in a large number of cases which afterwards ran a mild and perfectly natural course. Still, when you find blood in the stools, you will feel very much alarmed, for you do not know but that the next passage will be followed by fatal hemorrhage.

The worst hemorrhages however, occur when the sloughs are separating—any time from the beginning of the third week, on. At this time there is danger of bleeding in every case of typhoid fever. It may occur in cases going on perfectly well, and where there have been few abdominal symptoms. The ulcers may be few in number, but may extend deeply, opening a blood vessel. If the walls of the vessel have not retained their tonicity and contractility, you may not be able to check the hemorrhage.

Again, we may have hemorrhage, beginning in cases where the disease is of a malignant type, where the vitality of the whole system is greatly lowered; when you have leakage of blood developed in these cases, it is always a very grave symptom; for in such a condition the vessels do not respond readily to remedies, and the patient is in a very unfavorable condition for having hemorrhage.

After a mild hemorrhage, occurring early, the pulse is not materially altered and the temperature remains the same; but after a grave hemorrhage, there will be marked shock. I have seen the temperature fall three or four degrees. Of course, in a short time, the temperature again goes up. Thus, in this case, we had a fall of a degree in the temperature. A fall in the pulse is less common. I have seen a fall of temperature attended with an increase in the pulse rate. The fact that the pulse comes down, is rather favorable than otherwise. I should consider the prognosis more favorable if, after a severe hemorrhage, the pulse remained down, while the temperature increased, than if, while the temperature remained down, the pulse became rapid and feeble.

How are we to meet these hemorrhages, where they are so small and occur so early. I never make any change in the treatment. I simply watch carefully. But where there is a large hemorrhage, you cannot stand by waiting and watching. I want to impress upon you, here, the fact that you have a patient very ill with typhoid fever, who has still a considerable period of illness to go through, and that he requires the greatest possible care in his diet and treatment, and that nothing should be put into his system that would have a depressing or disturbing effect, unless it is absolutely necessary. I am sure that there are many modes of treating hemorrhage, which you might be tempted to employ, that would be worse to the patient than the hemorrhage itself.

In this first case, we had a hemorrhage which nothing would stop. In the man before us, very little was done for the hemorrhage, for I think that three or four fifteen drop doses of wine of ergot could have but little influence on the bleeding. If we had set on this man with large doses of astringents, if we had commenced powerful stimulation, we might have so irritated the gastro-intestinal canal as to rather favor hemorrhage than to arrest it.

I should not dare to trust a patient with a large hemorrhage to nature alone, but I want to impress upon you that you should not feel compelled to at once put the patient on active anti-hemorrhagic treatment.

What, then, is the safest course to pursue? In the first place, I shall suppose that you have treated the case judiciously from the beginning. I am sure that if you have done this, *i. e.*, kept the patient absolutely quiet, kept him on a suitable diet, as skim milk, light meat broths, etc., given a small quantity of diluted alcohol, if alcohol is demanded, and given those drugs that modify the diseased action and lessen

ulceration, bad hemorrhage will be very rare in your practice. In proportion as the treatment is disturbing and calculated to irritate the local lesions of the intestinal canal, there will be danger of bleeding. If the treatment has been judicious the patient will meet his hemorrhage in a good state of preparation. The stomach and bowels will be in the best condition possible for receiving and assimilating food.

The best thing to do first is to apply ice over the abdomen. A bladder may be filled with cracked ice and applied over the right side of the abdomen. This can do no harm and may do good. I do not believe that it can do much good.

I would then inject into the subcutaneous tissues of the abdomen full doses of ergotine. I cannot doubt that ergotine exerts a positive effect upon the walls of the vessels, as far as they are capable of responding. Where there was purging, I should give such astringents as acetate of lead, tannic acid, gallic acid, and the astringent salts of iron. I should use them in the order mentioned. If the stomach was irritable, I should give no astringents by the mouth, but would give them by suppository or injection. Suppositories of acetate of lead, tannic acid or sulphate of iron might be used, or I might inject into the bowel a diluted solution of Monsel's salt or tannic acid.

There are two drugs which demand careful attention.

First, opium. The consideration of the question relating to the use of opium in typhoid fever is very important. I think that I have seen patients with hemorrhage from this disease killed by the narcotic doses of opium administered to them. It is important that the peristalsis of the bowel should be arrested. Patients with typhoid fever do not bear opium well. Where there has been hemorrhage from other causes, as in phthisis, or after labor, opium is born well. In the specific fevers opium in large doses acts as a depressant to the nerve centre. We must consider very carefully how far we may use opium to quiet the intestinal canal in typhoid fever. Opium does not always act in specific fevers as under other circumstances. It sometimes irritates and aggravates those symptoms which it is given to allay.

The use of opium in this case was perfectly judicious. He took fifteen drops of laudanum (which contains about half a grain of opium) at a dose. He received four doses, or about two grains of opium. If the hemorrhage had returned, I should not have been favorable to pushing the opium until the constitutional effect was produced. I should have continued to give it in moderate doses, watching its effects. Moderate doses of deodorized tincture of opium or laudanum may be used, or a small amount of morphia may be injected hypodermically. In my use of opium I should be governed more by the tendency to actual diarrhœa, than by the tendency to freedom of hemorrhage. What good could opium have done in this first case? I think very little. It could have done a vast deal of harm if given in large doses. In the case before us, opium would have been borne much better if it had been required, for we had a cause of hemorrhage which was brought into action by movements of the bowel.

The second drug to which I referred is alcohol. I think alcohol is very serviceable in hemorrhage from typhoid fever. I think that patients are better for stimulation after hemorrhage, especially if it has been continuous. I should, therefore, use alcohol, governing the freedom of administration by its effect on the pulse and nervous system, unless it irritated the stomach and prevented the taking of food. If the pulse came down, the tongue remained moist, and the tympanitis did not increase, I should continue the alcohol.

This man has not had a drop of alcohol, yet he has gone through a severe illness and is doing as well as could possibly be desired.

Let us study the condition of this man to-day. He is not at all deaf. He puts out his tongue, and you see a marked ulcer on the left side. In this disease ulcers may exist on any of the mucous membranes; they may occur in the nose—and this is one of the causes of epistaxis—in the pharynx, in the œsophagus, in the trachea, in the little glands of the lung, in the glands of the intestine. Lymphoid tissue, whenever it exists, may be affected, but the local symptoms are most marked where this tissue is most plentiful, which is in the bowel.

The tongue is cleaning off nicely. It is moist. It is no longer enlarged. The expression of the face is natural. The pulse is 78 and markedly dicrotic, *i. e.*, a large beat followed by a small one. This is due to the relaxation of the artery allowing the secondary wave to be transmitted so readily that we recognize it. It is quite common in the third week of the disease. It is not a grave symptom if the pulse is not rapid.

The abdomen is moderately distended. The spleen is somewhat enlarged. There have been no new spots of eruption developed during the last few days. The appearance of the abdomen indicates that the ulcers are not yet well. His

temperature was 100.4° this morning. The treatment will be continued, and I shall try to show him to you later, so that you may be able to estimate the progress.

Communications.

"HABIT CHOREA."

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

The name of the affection which is the subject of this paper was given to it by S. Weir Mitchell. To me it seems a very appropriate addition to the nomenclature of disease.

In his opening remarks on this neurosis he says, "I have over and over, in my clinics, called attention to a disorder of childhood which is the source of some anxiety and more annoyance, both to parents and physicians. This trouble I venture here to label habit chorea, and for reasons which I think are good, and which will appear in full as we consider the cases.

"Over and over some anxious mother will ask you to notice her child, on account of some little trick or gesture in which the child indulges. Then you will see that it is winking rapidly, or pursing up the mouth, or drawing it to one side, or perhaps the brow is lifted at intervals, or a shoulder is shrugged, or some forward movement of the jaw or head is repeated over and over at varying intervals." (Mitchell on Nervous Diseases, p. 146.)

Dr. Mitchell thinks children are more obnoxious to this affection than adults. My very limited experience shows more cases in adults than in children, and more in males than in females, though it is reasonable to suppose the reverse would be the rule where experience is large. No doubt in the adult cases seen by me the habit had begun in childhood or early life.

"In many cases the single grimace or motion is repeated for months and then disappears; and, if this were all, I should hardly think it worth while to label so trivial a disturbance of health; but in other cases the first habit is lost; by and by another takes its place, so that the variety and obstinacy of the habits become troublesome; or, worse still, the patient has a large repertory of these performances, and will execute a remarkable variety in one day. Usually, in such instances, there is some one motion which is more violent or more frequent than the others." (Loc cit.)

It is believed that this trouble results from "some fall from the plane of health," which may be discovered by careful search into the history of the individual cases. It may grow out of the rapid changes of childhood in their growth, "Cyclical changes," which, being but transitory, "may bring or take away tendencies to neurosal disorders." No doubt such clinical facts as these, which have long since been recognized by the profession, have given rise to the commonly heard phrase in reference to some neurotic trouble in children: "O, he'll outgrow it," or, "After puberty she will be all right." Our little experience confirms that of the author referred to, in the fact that attention to a child thus afflicted increases the trouble for the time. And also that lowering of the plane of health has a like effect. It is well known that it also results in common chorea and many forms of the neuroses. Children thus afflicted are more excitable than others in health, or than themselves in health. These latter clinical facts show the close relation the disease bears to true chorea, as does also the fact that habit chorea occasionally lapses into the common type.

"If you ask an intelligent child who is thus diseased why it makes the grimaces, or repeats, at intervals, some odd movement, you will learn that while the patient is able, in most instances, to restrain itself and control the exhibition of motor disorder, this restraining power becomes increasingly difficult the longer such effort lasts, and that a certain malaise or discomfort results; while to give way and let the morbid impulse have full sway is attended with a sense of comfort and relief." (Loc cit.) Such is no doubt the fact with regard to many of these cases, in the early history of them. In one case which I have very closely observed this statement seemed to be fully verified, while in several others the habit had become so strongly confirmed that it was quite if not absolutely impossible to restrain the motion.

During the winter of 1879 and 1880 attention was called to a healthy lad of nearly twelve years, who had acquired the habit of, perhaps once every one or two minutes, suddenly lifting the right shoulder and drawing the head down. The lift in the shoulder was not apparent unless the movement was closely analyzed. The movement was just such as we often see men make when the shirt or coat collar, for some reason, causes an uneasy sensation at the nape; a kind of juke of the head. In the latter, however, there is not so apt to be the lift of the shoulder. Indeed, in the lad above referred to, I was not sure but that an uneasy fitting collar was the exciting cause of his trouble. However, during the winter of 1879 he had a very severe and

prostrating attack of bowel disease, which brought his health far below par, and kept him out of school for six weeks. Whether he had the habit prior to this severe illness I do not know, but it was very marked soon afterward. Wherever he was, about every minute or two, up would fly the shoulder and down would go the head, the movements being consonant, and in some degree regular. After keeping the case under observation for some days, and satisfying myself that the movement was largely or altogether under control of the will, I undertook his relief without using any medication whatever, but solely by an appeal to the boy's reasoning and will powers. He was a reasonable lad, and seemed all unconscious of his affliction, yet recognized it at once when his attention was called to it. First he was made to understand how awkward and ridiculous the movements made him appear, and second that the habit would not only grow on him as to the extent of the movements, but also beyond his power to control them, and third, his will power was strongly enlisted to conquer the trouble. He was gladly willing to help free himself from the habit, and the whole family were enlisted to help him. Whenever any one of them noticed the movements, he was pleasantly and playfully reminded of it. Often while poring over his studies, or reading, or playing, or in ordinary conversation, he was saluted playfully with, "now juke your head awhile," or "heave up your shoulder a bit," or "bob away now." So determined was he to conquer, and so often was he thus or otherwise reminded, that in perhaps three months not a trace of the trouble was left, nor did it assume some other nervous movement instead of this, as is often the case.

Not all cases are thus easily managed, for some are more severe and the subjects are far less tractable. Fortunate, indeed, is the case that is relieved before it reaches the confirmed and incurable habit.

Another case coming under my notice was that of a lawyer, a prosecuting attorney, who had the habit incurably fixed upon him of jerking down his head, giving it a twist to the left, and at the same time elevating one or both shoulders, and often at the same instant extending his right arm and hand or lifting the right elbow to a level with the shoulder. These movements were gone through with about once every two to five minutes, and if he was excited or intently engaged mentally they were more frequent. They had become seemingly uncontrollable, for even when spoken to concerning the movements, and while trying to restrain them, they occurred with full regularity and frequency. He never seemed in any way annoyed or distressed because of his awkward affliction.

A similar case, but far less marked, was that of Judge B., who had the uncontrollable habit of shrugging his right shoulder, accompanied with more or less simultaneous contraction of the sterno-mastoid muscle. He was quite sensitive and greatly annoyed at these involuntary jerkings. The habit had been on him for years, and when informed that it had become confirmed and incurable he seemed much grieved.

Another case was that of a surgeon with whom I often met in the late war. He had the habit qnite often, but at irregular intervals, of dropping the lower jaw, and throwing his right hand up to his chin and resting his index finger against the chin until the momentary spasm was over; also of twitching the upper lip and snuffing the nostrils about the same time. The habit had been on him long and he seemed utterly unconscious of the ghastly grimace.

The only other case I shall now name is that of a young lady, of robust appearance, whose every organ and function seem to be perfectly normal. As long as she walks or works there seems no trouble, but as soon as she ceases there is a sudden twitching of the upper lip, a snuffing of the nostrils, especially the left one; the left ala-nasi is elevated, the eyebrows are drawn down, and the lids close with a spasmodic firmness similar to that observed when one is about to be struck in the face. Also when she is sitting there are sudden jerkings of the limbs and movements of the whole body, of which she is conscious but cannot or does not control. Any depression of health increases the whole trouble.

As to treatment, we have little to say; most of the cases observed have been old, confirmed ones, and incurable. We like the plan adopted in the first case, wherever circumstances will permit. But too often such a course would be impracticable.

Wherever the cause can be ascertained remove it. If tonics are needed, perhaps arsenic is the best. The sulphate of zinc is good. Often iron, with simple bitter tonics. Where there is too great strain on the nervous economy, this must be removed. Often for children an entire change of associations and scenery are demanded.

I have never put it in practice, but have often thought it would be a good plan to so arrange a pin or other sharp instrument as that, whenever

the abnormal movements were made, it would not only be a reminder, but a painful one. The moral and painful effects would, perhaps, soon break up the habit, or go far to do so, in connection with other proper treatment, especially with tonics. This affliction seems a trivial thing, but it is no small matter to be the subject of it, or to have a near friend or relative thus afflicted. Many cases will be found among nervous children. Some will simply need toning up to health. Others will need diligent care, long and perseveringly.

THREE CASES IN GENERAL SURGERY IN WHICH THE DENTAL ENGINE WAS EMPLOYED FOR EXSECTION OF BONE.

BY J. S. WIGHT, M.D.,

Professor of Surgery at Long Island College Hospital.

CASE 1.—A boy about eighteen months of age had empyema of the left side of the thorax: a patient of Dr. Harrigan. On consultation it was determined to open the pleural cavity and let out the pus. I recommended the use of the dental trephine as the best means of getting through the rib. Dr. B. F. Westbrook gave the patient chloroform, and assisted by Dr. Harrigan I performed the following operation: An incision down on the eighth rib, two inches in length, was made, about midway between the sternum and spine; a small portion of the periosteum was raised from the rib; a trephine three-sixteenths of an inch in diameter was applied to the upper half of the rib, and by means of the dental engine a small button of bone was cut out and removed in a very few seconds; the same trephine was then applied to the lower half of the same rib, backward and downward from the place of its first application, and another button of bone was very quickly removed; there was then a complete solution of the continuity of the rib; the posterior end of the anterior costal fragment was gently raised by a small elevator, and a minute piece of it cut off with a pair of curved bone-pliers; the anterior end of the posterior costal fragment was also raised in the same manner, and a minute piece of it cut off with the same bone-pliers; there was then an opening down to the subcostal tissues, about three-eighths of an inch wide and about six-eighths of an inch long; in this opening, with a curved bistoury, a transverse incision about four-eighths of an inch in length was made directly into the pleural cavity; then there was slowly evacuated about one-half pint of so-called healthy pus. During the entire operation there was but very little bleeding, the intercostal artery being avoided. In fine, I am quite sure that the operation in this case was performed more speedily and safely by the means employed than it could have been by any other means at our command. And it may be of interest to know that this case did well after the operation, which was performed on the 25th day of April, 1881.

CASE 2.—May 1st, 1881. Mary S., twenty months of age, was trampled on by a vicious horse, and had one of her ribs on the left side broken, near the sternum, and had a compound depressed fracture of the skull on the right side, about three and one-half inches directly above the meatus auditorius. The line of fracture was crescentic in form, and about two inches in length. A large piece of bone was bent downward, about three sixteenths of an inch; the patient was unconscious and the pupils were moderately dilated; there was marked left hemi-spasm, especially of the upper extremity; there was copious bleeding from the nose, and there was some vomiting of blood, and it was decided, on consultation with Drs. Matheson and Northridge, to elevate the depressed bone.

Dr. Matheson made an incision over the edge of the sound bone and the depressed edge of the broken bone, and cleared away a small portion of the periosteum, so that I could apply my dental trephine at the edge of the sound bone. The trephine was one-fourth of an inch in diameter, and with a few turns of the wheel of the dental engine, in a very few seconds, a small button of bone had been removed, without any injury whatever to the dura mater. Then Dr. Matheson gently inserted a small, strong elevator into the trephine hole, and under the edge of the depressed bone, using the sound bone of the skull for a fulcrum, and with the employment of considerable force, raised up the edge of the depressed fragment. The entire operation occupied only a few moments, and I am confident did not add materially to the severity of the shock; certainly the trephining could not have been done so speedily, and with so little disturbance, if I had used the ordinary instrument. It may be a matter of interest to note that this little patient did not survive her injuries.

And it may be remarked that in this case the advantages of the dental trephine may be stated by saying, there was the minimum of shock from the operation, because it was done quickly and safely, and without any special or marked additional disturbance of the general system. In fact, it is somewhat difficult to trephine a very thin skull with the ordinary trephine, as I know by

experience, and so I incline to the view that the dental trephine will be found to be more manageable than the ordinary trephine in operating on a very thin skull.

Case 3.—A man about fifty years of age, a patient of Dr. Wallace, had severe inflammation in and around the right knee joint, ending in peri-articular abscess and some necrosis of the upper end of the tibia. This patient was admitted to the Long Island College Hospital, where, in the presence of the medical class, I made two incisions just below the knee joint, one on each side of the tubercle of the tibia, down to the bone. The periosteum at the bottom of each incision was carefully raised up, when a dental trephine one-fourth of an inch in diameter was applied, and a button of bone was removed from the compact tissue on either side. This permitted an examination of the cancellous bone in the base of the tibia, which was found to be necrosed quite extensively. The openings already made were now enlarged by a gouge and pliers, and the necrosed bone was extensively dug and scraped out, leaving, for the purpose of support, a firm bridge of compact bone in front. The cavity was dressed by packing it with oakum containing carbolized oil, and it quite rapidly filled in with scar-tissue. There was no special surgical fever following the operation. In this case Esmarch's bandage was used, rendering the operation bloodless. Also it may be noted that the operation was done under the carbolic spray; and it is worthy of remark that there was no fresh disturbance set up in the joint, notwithstanding the layer of bone left across the base of the tibia was very thin.

The above cases incline me to believe that the dental engine will be a valuable addition to the instruments of the surgeon. I am convinced that the surgeon can do some pieces of work better with the dental engine than he can with the usual instruments. Small and short points of broken bone can be safely and quickly cut off with a small circular saw run by the dental engine. Holes can be made with accuracy, facility, and safety, in the ends of resected bones, for the purpose of inserting wire sutures. This would have an advantage over the ordinary hand drill, which is liable to slip and cause damage to the tissues. In one instance, swiftness of motion is employed; in the other, considerable pressure is used to perforate the bone. In resecting small ribs and thin skulls, and in exploring the ends of the long bones, the dental engine will no doubt prove to be of unquestionable utility, because it is safe, accurate, and speedy.

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

SERVICE OF WM. GOODELL, M.D.,

Professor of Clinical Gynæcology.

May 25th, 1881.

Reported by Guy Hinsdale, M.D.

Recto-Vaginal Fistula.

Case 1.—This colored woman comes to us from Delaware, with the following history. She says she is thirty-six years of age; that she is married, but has never had a child; she states that when she has a passage the contents of the bowels are passed through both the vagina and the rectum. She has, as you can all see, a fistula directly through the posterior wall of the vagina, the sound entering the vagina and emerging from the rectum. She, of course, has no control over her wind.

When I ask her the cause, she says that it came from being constipated. Recto-vaginal fistulæ come usually from the pressure-sloughs and the lacerations to which the vagina is liable during a difficult labor. Usually, however, it is a vesico-vaginal fistula that is produced; where we have ten vesico-vaginal fistulæ we have one of the rectum and vagina. During labor the head becomes arrested at the symphysis pubis, and continued pressure here is more disastrous than if exerted over the broad surface of the sacrum; moreover, the bowel is protected by a jutting promontory.

I will examine the neck of the womb, to see if it is a virginal cervix. I should say that it is. Let us see if there are linea albicantes present. I find there are none. What, now, is the cause of the fistula? There may be a stricture of the rectum. These strictures may be either simple or malignant; if simple, they generally arise from syphilis, although they may also follow an abscess or any irritation, especially that of fecal accumulation. I cannot, by my questions, ascertain that she has ever had syphilis. I examine per rectum, and I find a stricture, and it is below this that we have the fistulous opening; and this is always the case. She must have great difficulty in moving her bowels. I proceed slowly, for a stricture, if malignant, is friable, and a rupture is easily caused. I should say that this stricture is about half an inch in width. Malignant strictures are of a cancerous nature, and are characterized by their irregular and nodulated induration, the fistula being produced, in these cases, by the involvement of the bladder or the vagina and the disorganization of the new growth. Here, however, we have the bowel perfectly movable, and this stricture seems merely to be a redundancy of fibrous tissue. Passing my finger within and beyond the obstruction, I find rugosities, the bowel above being in a normal state.

The three things which I wish to impress upon your minds are these: 1st, that these fistulæ, in the vast majority of cases, depend upon the lesions of labor; 2d, that, if due to a stricture, we shall find the seat of obstruction *above* the fistulous opening; 3d, that, if the stricture is syphilitic, the fistula is extremely difficult to cure.

When the fistula, as in this case, is the result

of stricture, we must remove the stricture before we can do anything with the fistula. After a course of gradual dilatation, and after securing for her free movements of the bowels and a normal calibre of the gut, we shall be ready for the operation. The first step will be to lay open the stricture, converting the case into one of ruptured perineum. If the obstruction were higher up this would not be the proper plan to pursue, but it will be applicable to the case before us. After performing the usual operation for the cure of ruptured perineum, a self-retaining catheter should be introduced, a matter of great importance, not only to your patient, but yourself, for it is a very difficult and annoying thing to catheterize these patients. The food given should be light, and should consist of beef-tea and broth in preference to milk, which makes hard fæces. She may have a soft-boiled egg on the third day.

Note.—On June 1st Dr. Goodell performed the operation as described, after forcibly stretching open the strictured portion of the gut. The result was perfect union at all portions of the wound and the obliteration of the fistula.

Neurasthenia.

Case 2.—This girl is seventeen years old. Her monthlies began at the age of thirteen, and were free from pain until three months ago, when her trouble began. She lives at home and goes to school; she says that for several months she has had dizziness of the head, and that now she suffers from backache, headache, and cold hands and feet. This is an example of a history you will often meet with. A girl who entered puberty in blooming health and without an ache finds that, in two or three years, her health begins to fail. Her appetite is lost and she grows pale and weak; she has cold feet, blue finger-nails, and complains of all manner of pain—headache, backache, spine-ache, and a general oppressive sense of exhaustion. Her catamenia, hitherto without suffering, now begin to annoy her more and more, until they become painful in the extreme. She has an exhausting leucorrhœa, and bladder troubles soon set in. The slightest mental or physical exertion is wearisome beyond measure; life becomes a burden to her and she becomes hysterical.

Now what is the meaning of all these symptoms—the headache, the backache, and the dysmenorrhœa? The meaning is, either that she has over-studied or that she has suffered from some disappointment. The yet developing nerve-centres of this over-taxed girl were unable to cope with the strain thrown upon them and they broke down. The jaded nerves made poor blood and faulty circulation, and from this arose the cerebral and spinal irritation and the general exhaustion of the system. Such a case comes to us to-day; she is intensely neurotic; hyperæsthetic to the last degree. We can take her away from her studies and in titute what is known as the "Rest-Cure;" but if there is any heart trouble here, if there has been any love disappointment, the treatment may fail.

Upon introducing a sound into the uterus, I find that the womb is in its natural position, but the instrument passes in three inches; there is doubtless some little congestive enlargement of the organ. I think there is also a slight erosion of the mouth of the womb. The commonest mistake in gynæcology is that of mistaking a laceration of the cervix for an ulceration; the next most frequent mistake is in treating young women, locally, for uterine disease, when all their troubles arise from emotional or constitutional causes. Your buxom, ruddy country-girl comes to a city school; she is ambitious and studies hard, but does not get the fresh air she has been accustomed to; she has, after a year or two, cold feet and clammy hands, dysmenorrhœa, leucorrhœa, and that inevitable backache. I believe that out of the sixty-five thousand physicians in this country sixty-four thousand would call it a disease of the womb, attributing all her troubles to the uterine disorder, and treat her accordingly. Dr. A finds what he calls an ulceration, and treats it by the most approved methods, but the patient gets no better. Dr. B discovers some displacement of the uterus, an anteflexion most likely, which every virgin has, and he puts in a pessary; but she still unaccountably persists in staying ill. Dr. C calls it congestion of the womb, and she is subjected to a painful, an unnerving and a humiliating local treatment, without any benefit whatever. Unimproved, she becomes hysterical; she drags herself from one consulting room to another, getting drugged, and douched, and cauterized, and pessaried, until finally, in despair, she settles down to a sofa in a darkened room, and lapses into hopeless invalidism.

It is for just such cases as these that Dr. S. Weir Mitchell,* of this city, has devised a way of cure, and I know it to be the best, for I have tried it over and over again, with great success. The patient is kept strictly in seclusion for several weeks, and during this time she sees no one but her nurse and attending physician; absolute rest is enforced, and massage, electricity and feeding constitute the treatment. The results of such a course of treatment are simply marvelous. These patients gain flesh; they begin to sleep soundly from eight to ten hours every night; the dysmenorrhœa disappears and their appetite develops to an astonishing degree.

These hysterical cases show a marked lack of nerve coördination. We are made up of halves; our organism is a twofold one. When we destroy the equilibrium between opposing parts we have non-coördination. The 'nervousness" that we speak of is a certain non-coördination, a mal-nutrition of the nerve centres, followed by disturbances of the circulation from the weakened innervation. The secondary disturbances consist of local anæmias or hyperæmias. There will be sudden ebbs and flows of impoverished blood in the various vital organs, and we may see in the same person, and starting from one cause, alternations of anæmia and of hyperæmia of the brain, stomach or spine, with very generally stable hyperæmia of the reproductive organs. The cerebral exhaustion or irritation manifests itself by wakefulness and heaviness, by asthenopia, and an inability to read, or to write, or concentrate the thoughts on any given subject; the exhaustion of the stomach, by flatus, nausea

* "Fat and Blood and How to Make Them." Phila., 1877.

or gastralgia and capricious appetite; the spinal exhaustion, by tender spots, the backache and general weariness. The anæmia of the reproductive organs is exhibited by amenorrhœa, or by scant menstruation and by neuralgic or hysterical pains; the hyperæmia, by congestion, dysmenorrhœa, menorrhagia and leucorrhœa, by uterine flexions and dislocations, and by a variety of subjective and objective phenomena with which you will become familiar.

But this girl cannot afford to take the rest-cure, so I shall do the next best thing; I shall try to give her good, thick blood, and feed up the nerve-centres. She will take Blaud's pill, which, as you are aware, is made up of equal parts, two and a half grains, of the dried sulphate of iron and the pure carbonate of potassium. During the first three days, one pill is to be taken after each meal. On the fourth day, four pills are taken during the day. On the fifth day, five pills; on the sixth day, six—that is to say, two pills after each meal. For three days more six pills are taken daily; then the dose is increased by one pill daily until five pills are taken after each meal, and the patient receives 37½ grains of the sulphate of iron in the twenty-four hours. For her bowels, which are costive, I shall order an occasional Lady Webster pill. She will also take malt, and a good rest every afternoon.

Amenorrhœa, or irregularity of menstruation, is extremely common at this period of life. Indeed, I have been repeatedly asked by ladies in this city, and in other cities, if, in the female boarding schools, drugs are not secretly given to the girls, in order to check the menstrual flow and save the labor of the laundry! Why! there is no drug that will stop it. I wish there were, for I have often been put to my wits' end in cases of menorrhagia. A physician, even, on one occasion wrote to me about some of his patients who had come home from the same school with much knowledge but no menstruation, and asked, "Is it possible that some drug has been secretly given to these girls, to lessen the washing?" The true key to the mystery is found in the modern system of over teaching, of over-studying. If the mental strain of study will do it, what shall we say of the mental strain of love—the most powerful of all emotions?

Medical Societies.

THE BRITISH MEDICAL ASSOCIATION.

Our report of the Forty-ninth Annual Meeting of this Association has been long in hand, the International Medical Congress having taken precedence of it. The meeting was held at Ryde, August 9th, 10th and 11th. After the presidential address by Mr. Barrow, Mr. Fowler, the general secretary, read the annual report of the Council, which stated, among other things, that the roll of members now reached 9202, and that the next meeting would take place at Worcester, 1882 being the jubilee year of the Association, and Worcester the town where it was first started by Sir Charles Hastings. The last passage of the report ran as follows: In conclusion, your council congratulate you that, whether in point of members, earnest and effectual scientific work, public influence, journalistic efficiency, or material prosperity, as tested by its balance sheet, the British Medical Association has never held a more commanding position.

Little general business of importance was transacted at the meeting. The opening addresses are discussed elsewhere. The sections were, however, active, and we make the following selections and abstracts from the papers and discussions presented before them:—

Section on Medicine.

Dr. R. S. Smith presented a paper on

CODEIA IN THE TREATMENT OF DIABETES.

Dr. Smith said that opium had been empirically used in the treatment of diabetes, from the time of Ætius. In recent times the action of the drug had been investigated by Pavy and others, with the result of showing the practice to be the result of well-established experience; and observers had endeavored to ascertain to which of the alkaloids of opium the beneficial result was due. Codeia was first recommended by Pavy, on the ground that it could be given in large doses without producing drowsiness. Of late it had been much used, as recommended by Dr. Saundby, in the cough of phthisis, where it gave great relief, and had an appreciable soporific effect. But it was in diabetes that codeia had been of greatest service. As regards the dose, small doses were recommended by some authors, but Dr. Brunton stated that it might be given in doses of a quarter to half a grain three times a day at first, the medicine being increased gradually until sugar disappeared from the urine, or increasing drowsiness demanded its discontinuance. Dr. Pavy had given a series of cases in *Guy's Hospital Reports*, showing the beneficial effects of opium, morphia, and codeia in removing sugar from the urine; the advantages of codeia being that it did not produce the same narcotic effect as opium and morphia. Opium was given in doses up to nine grains, morphia up to three grains, and codeia up to ten grains three times a day. Dr. Cavafy had given fifteen grains thrice daily, with good result. Dr. Smith considered that alkalies and all other treatment, even dieting, were inferior to codeia as remedies for diabetes; and that in this disease it might be considered almost a specific, and should be the first remedy tried, and should be given in fairly large doses until some physiological effect was produced. Codeia had been said to produce convulsions; but the literature of the subject did not support this, and he had never seen any such effect. He related three cases, which all exhibited marked improvement while taking codeia, which improvement ceased when the codeia was withheld, and was renewed on its repetition. Morphia had a good effect in two of the cases, but the improvement was much less marked than with codeia.

In a discussion on

RECTAL ALIMENTATION,

Mr. De Berdt Hovell (London) said that twenty-two years since he recovered, by nutrient enemata, a person suffering from diphtheria, who had taken nothing for fifteen days; and he knew of

cases of diphtheria that had been lost, from the want, in his opinion, of that useful remedy. Stricture of the œsophagus was another disease in which it might be most beneficially used. He agreed that it should be adopted as a means of treatment in other diseases. It had often occurred to him that, in typhoid fever, injections into the rectum might be used beneficially, if used with care, on the hydrostatic principle, and not by the syringe. If the bowel were simply washed out, it might not only be the means of nourishing the patient, but also of improving the process of cure. In regard to the intervals for administering the enemata, he thought two or three hours much too frequent, at any rate, for any length of time together. In many cases, the bowel was too irritable to retain the nutrient injection, and great care should be taken that it was not given so frequently as to produce or increase irritation. Three or four times a day were, he thought, sufficient.

DISCUSSION ON ACUTE SPINAL PARALYSIS.

Dr. Gowers (London), in opening the discussion on this subject, remarked that he could best fulfill the task entrusted to him by pointing out those points on which the comparison of the experience of many observers is most likely to add to our knowledge. One of these was the question of the influence of hereditary tendency to nervous affections, which, although small, is sometimes effective. The remarkable frequency of the affection in young children was altogether unexplained, and was remarkable, since other acute inflammations of the nerve-tissues (as distinguished from the meninges) were not common in them. In regard to its occurrence at other ages, an instance in which it came on in an old man aged seventy was mentioned. The influence of dentition was less certain than that of cold, in causing the disease; but even the latter had probably been exaggerated. Sinkler's statements as to the relation to season were mentioned, and a comparison of facts regarding the point on a large scale was suggested. Among the symptoms, the equivocal character of the onset, simulating an acute specific disease in the child, acute rheumatism in the adult, deserved discussion; and in connection with it, the question of the relation of the affection to other acute diseases. This relation had certainly been exaggerated, owing to errors in diagnosis; and the only disease to which a relation seemed well established was typhoid fever. Of this two instances were mentioned. Early electrical examination (*i. e.*, at the end of a week) was urged as of great importance, both as regards diagnosis and treatment, and, properly effected with faradization only, involved no risk. An illustrative case was mentioned. The importance of the scientific study of these cases, as regards the representation of movements in the cord, was illustrated by the different pathological association of the two parts of the pectoralis major. The occasional but rare occurrence of spinal degeneration in adults who had suffered from infantile paralysis is a point on which further facts are needed. Two cases were mentioned. In treatment, several questions were raised as deserving discussion. Early treatment should be directed to the character of the lesion, rather than to the tissue in which it occurs. Of later treatment, the value of time and method of electrical applications were especially discussed.

In regard to the

TREATMENT OF INSANITY,

Dr. J. Groves stated that in the majority of cases there was a definite history of some special cause of exhaustion, which, coöperating with instability and infirmity of nerve element, inherited or acquired, produced insanity. There were usually anæmia, with or without evidences of blood-stasis, and sleeplessness. The cells of the mind centres were exhausted, and repair could not take place without rest, and until the condition of the circulation was remedied and the quality of the blood improved. Rest might be secured by moral or by medical treatment. Moral treatment aimed at breaking through the self-absorption and exaggerated egotism almost always present by diverting the attention, and thus giving rest to the centres. The choice of various sedatives and hypnotics to tranquillize or procure sleep would be decided by individual experience, but they were, at best, necessary evils, to be rarely used, and only after other means had failed. But the phenomena exhibited in many cases of insanity pointed to abnormal and irregular vaso-motor action, owing possibly to impulses from the deranged higher centres, or to insanity of the vaso-motor centres themselves, from inherent instability or from defective nutrition, due to impoverished blood, or to blood contaminated by the waste products of the system. The remedy must be found in the blood itself. How best to minister to the nutrition of the blood and to improve its qualities might be a matter of individual opinion. Good food might not be sufficient, for it might not be properly assimilated; and, perhaps, cod-liver oil and iron, alone or with arsenic, in small doses and long continued, offered the best prospect of success. The various organs, especially the bowels, should be kept active. Milk might enter largely into the diet in many cases, and abundant out-of-door exercise was essential in most. It was of paramount importance that appropriate treatment of mental diseases be applied early, and that it be pursued with perseverance and patience. For the most part the treatment of insanity in its earlier stages, when it was most likely to be successful, fell to the lot of the general practitioner, who, notwithstanding the very evident neuroses of different members of the patient's family, often came too hastily to the conclusion that he had to deal with an incurable disease. It was of the highest importance, therefore, he should be practically acquainted with unsoundness of mind in its various forms.

On the subject of

JAUNDICE,

Dr. Lauder Brunton delivered a long address, mainly discussing the theories of the disease, in which he did not seem to gain the general assent of his hearers. Questioned as to some points of treatment, he replied that he had asked what doses of ipecacuanha were used. He had himself had no experience of the use of ipecacu-

ar ha in jaundice.* In fact, it was only a month or two since he learned of it, and he had had no cases directly under his treatment since. Dr. Ewart had mentioned that a quarter of a grain to a grain was used in India. It depended upon the nausea. Lately, also, Dr. Hook, of Bombay, recommended it in very large doses, in the same way as for dysentery. He gave a sixth of a grain of morphia beforehand, and then thirty grains of ipecacuanha half an hour afterwards, as a bolus; and he had found cases of jaundice improve very satisfactorily in a very short time, and one case in twenty-four hours that had resisted other treatment. The other plan of treatment was that of continued small doses. Then, in regard to the action of euonymin, he had not tried it in jaundice, but in other cases of intermittent liver disorder in consequence of malaria, in men who had been out in India, say, three grains of euonymin, made up into a pill, every second or third night, followed by a little Carlsbad water in the morning. Usually he told his patients to take a large draught of the water in the morning after the pill, and on the other mornings the same quantity of water taken in small sips as they did at Carlsbad, so that a tumblerful should last them till they had finished dressing—the water to be previously heated to the warmth of warm tea, so that they could comfortably sip it. This combination of euonymin with Carlsbad water gave very good results indeed in these cases of biliary disorder depending upon chronic malarious poison.

IS ANTIPYRETIC TREATMENT JUSTIFIABLE?

In this paper Dr. John Haddon said that in health the normal temperature of the body is maintained when exposed to either extreme heat or cold. In disease the equilibrium is lost, and as a rule the temperature is raised when pyrexia is said to exist. In Germany the pyrexia is believed to be the cause of the changes which cause death in fevers. On this theory the antipyretic treatment has been adopted, which consists in placing the patient in a cold bath to reduce his temperature by the direct abstraction of heat. He believed such treatment not to be justifiable, for the following reasons: 1. The theory is incorrect. *a.* This is proved by the fact that many cases are on record in which the temperature was much higher continuously than the advocates of this theory believe to be certainly fatal, and still all the bodily functions were healthy, and recovery followed. *b.* We find that a temperature which in one disease is regarded as almost certainly fatal, is by no means of such serious import in another. *c.* In the same disease one frequently sees the identical symptoms as severe in conjunction with a low temperature as with a high one. 2. It is dangerous. To be assured of this it is necessary only to read the reports of those who have tried the treatment, which affirm that collapse and failure of the heart's action are produced. The treatment of fevers by drugs, such as quinine, cannot properly be called antipyretic, but would be more correctly termed febrifuge, seeing that their action is more obscure, and certainly more general, than that of a cold bath. Cold affusion, as practiced by Dr. Currie, appears to effect "the solution of fever" by the shock it gives to the system. It is more easily used than the bath, and no danger attends it; and, though it does not reduce the temperature so much as the cold bath, it seems more worthy of our attention, and it is probable that any good that results from a cold bath is caused by the shock during the act of immersion.

* The value of ipecacuanha in torpidity and functional derangements of the liver has been known for years to all readers of NAPHEYS' *Medical Therapeutics*, where it is given a prominent position.

Section on Surgery.

Among the articles presented before this section we mention one entitled

A NEW AND RELIABLE OPERATION FOR THE CURE OF WEB FINGERS, ETC.,

by A. T. Norton, F.R.C.S., London. The operation consists of cutting small flaps or tongues of skin from the posterior and anterior surfaces of the hand, with the bases of the tongues on a level with the heads of the metacarpal bones, and of attaching them together by their apices after cutting through the web. The flaps unite by the first intention, and thus any re-development of the web is entirely prevented. The points to be considered in the performance of the operation, in order to insure a good result, are the following: 1. The flaps should be cut thick, so that their vascular supply may be complete, and the chance of sloughing reduced to a minimum. 2. They should be cut rather narrow, with judgment, otherwise they become compressed laterally and bulge upward at the margins, instead of lying in adaptation to adjacent tissue. Such compression, of course, interferes with a free circulation of blood through the flaps. 3. The tissue between the knuckles should be cut back, or, if necessary, cut away, so that the apices of the flaps may lie well in contact with each other, without tension. 4. The flaps must be of sufficient length to prevent tension when the suture is applied. 5. The apices of the flaps are very small in children, so that a very small needle should be selected to carry the suture, in order to avoid unnecessary injury of the flap. 6. The position of the flaps should be carefully arranged, so that the limit of the new web may be in the line with the natural web of the finger. If the flaps unite, no web can re-form. There is no reason whatever why union by the first intention should not take place, if attention be paid to the above recommendations; and thus one of the most troublesome and unsuccessful of operations is converted into one most simple and most certain of success.

ON THE TREATMENT OF STRICTURE BY STRETCHING.

Reginald Harrison, F. R. C. S. Liverpool, advocated the employment of stretching in certain cases of tight stricture of the urethra, where retention had occurred and catheterism was difficult. In using the phrase "stricture stretching," as best describing the object in view, he did not advocate a new instrument or a new method of treatment; it was to the application of well-recognized principles that he wished to draw attention. Dr. Otis, of New York, had demonstrated the extent to which the urethra was capable of being dilated, and what was true of the healthy canal would be found to apply, though in a less

degree, to the strictured one. The dilator employed by Mr. Harrison was Holt's, with some special adaptations which had been made by Messrs. Krohne and Sessemann. In the first place there was attached to it a pilot bougie, which, in cases of tight or tortuous strictures, was invaluable. The number of dilating rods was increased to eight, so that the process of stretching might be gradual; and, in order that there might be no jerking as the several rods were introduced, a spiral spring controlled the separation of the instrument, instead of a screw. The size of the dilator was No. 3 English gauge; the largest rod brought it up to rather over 12, and between these two extremes there were seven gradations. The patient being placed under ether, the dilator was passed fairly into the bladder, and then the several rods were slowly introduced until dilatation was completed. When this was done a catheter was used, and all urine removed. A full-sized bougie was then passed every third or fourth day until the patient had learned how to do it himself, when he must be enjoined to continue the practice. In conclusion the author remarked that he was not recommending this as a panacea, nor as prejudicing other operations to which reference had been made, but as a safe and efficient expedient for meeting immediate difficulties and simplifying future treatment. If, in all cases of retention occurring with tight stricture, the use of this or a similar instrument followed upon catheterism, both patient and practitioner would be none the worse for the knowledge that, whatever spasm might temporarily do, at all events there was a way to the bladder, capable of admitting a No. 12 bougie, which had been made without any structural detriment. Mr. McNamara, of London, thought that the operation could be applicable to only a few cases, and spoke strongly of the advantages of the old operation of gradual dilatation, the cures after which were often permanent.

A FURTHER SERIES OF CASES OF IMMEDIATE CURE OF INGUINAL HERNIA.

W. Dannett Stanton, M. R. C. S., Hanley, related nine additional cases in which his operation for immediate cure of hernia had been performed, making a total of thirty-four cases. Of these, thirty had been quite successful, and the remaining four much benefited. There had been no death. In some of the patients, no truss had been of the slightest use. A tendon or catgut ligature was employed in three of the cases, passed in a similar manner to the screw, and retained *in situ* until the parts became consolidated. The result in these cases was found to be on the whole less satisfactory than in those treated by the screw alone. In them, however, the beneficial influence of Listerism was most marked, and the author advised its use in every such operation in which an animal ligature was employed. The paper concluded with an appeal to surgeons to give the operation for radical cure a fair trial, and not to rest satisfied with recommending the mere use of trusses; more especially to urge parents, in the case of young children, to have them cured while young by some operation which had been proved to be both safe and effectual.

EXCISION OF THE KNEE IN CHILDREN.

This was discussed by Mr. Stokes, of Dublin. The usual disease in which it was indicated was scrofulous synovitis. In these cases expectant treatment was vain. If the disease had extensively engaged the other structures of the joint, and caries also were perhaps present, the chances of success after resection were largely diminished; and, although the wound might heal without suppuration, and the results appear admirable when the patient left the hospital, yet he had seen examples of return of caries ten or twelve months afterwards, leading to abscesses, and the necessity for amputation. This course of events he had not witnessed when the operation was undertaken at an early stage of the development of the disease. He dissented altogether from the view that, in these cases, the requirements of resection were fulfilled by incision, injection, and drainage of the joint; for, even if the well-known risks of suppuration of the joint were perchance avoided by this plan of procedure, was the ultimate condition, he asked, a better one than it would have been had a resection been performed? He thought not; nor did his experience lead him to agree with the opinion of those who saw an objection to resection in subsequent atrophy or shortening of the limb. The explanation of this lay in the very fact that the operation was done at an early stage of the disease, when it was necessary to remove only a very thin slice of the articular ends of the bones, and the osteogenetic function of the epiphysis was therefore practically not interfered with. In none of the cases which suggested his remarks had he seen either atrophy or deformity. He referred to the faulty methods of dressing formerly in use, and even now not altogether abandoned, after excision, and described that which he himself employed. Listerian precautions were invariably followed, and the limb fixed at absolute rest, by two metallic splints, one applied on the anterior and the other on the posterior surface of the limb, and retained there by gypsum bandages. The absolute immobility thus secured conduced to the early healing of the wound, and he rarely found more than three or four dressings necessary. He alluded to an accident met with in two or three cases, namely, hemorrhage coming on some hours after the operation, not from any visible vessel, but from the cut surfaces of the hyperæmic bones. He thought it possible that this might be due to the use of the elastic bandage, and referred to the experience of the Leeds surgeons, who, he learned, had met with the same occasional accident, and who had abandoned the use of the elastic bandage.

ANTISEPTIC INCISION AND DRAINAGE IN EMPYEMA.

F. Richardson Cross, M.B. Clifton, Bristol, said that all fluid effusions into the pleura required to be early removed. Full re-expansion of the lung was the aim of treatment; but by prolonged compression the lung was crushed; and by continuous irritation the pleura tended to thicken and form false adhesions, which permanently bound down the affected lung. Every day that the effusion remained the danger was increased; and when medical treatment of two or

three weeks had been of no avail, the fluid should be partially, at least, removed. Absorption frequently followed partial removal. In cases of sero-fibrinous exudation no great danger threatened from putrefaction; but, as the fluid could not be accurately determined before withdrawal, it should be assumed to be putrescible, and all causes of putrefaction should be excluded. Aspiration removed pressure-risks and dyspnœa in all cases; and, if done carefully, produced no ill result except pain, while many cases of pleuritis were put towards recovery. If, however, the fluid were pus, special measures must be taken for its entire removal. A permanent opening at a dependent part of the thorax, with satisfactory drainage, was essential. Clinical experience abundantly proved this necessity for free continuous drainage; it also showed the great risk of admitting to the pus agents that might decompose it and render it fetid. An early operation, with dependent opening, free continuous drainage, and the reliable antiseptic method of Professor Lister, should result in a complete cure. Cases of long standing compression of lung would hardly result in its complete re-expansion; but the general health of the patient would recover itself, with more or less contraction of the chest and impaired breathing. The same system of treatment, with antiseptic or stimulating injections in place of precautions intended to exclude from the first septic influences. should cure most cases of old-standing pleural fistula; and, in a few obstinate cases, drainage and the approximation of the pleural surfaces would be encouraged by resection of a portion of one or more ribs. Three cases of cure —two perfect, one with contracted thorax, otherwise excellent—were related.

A NOVEL TREATMENT OF SYNOVITIS.

H. A. Martin, M.D., Boston, said his object was to show that "enlargement of joints, from whatever cause arising," could be cured by evacuation of the sac by aspiration, and the subsequent wearing of the pure India-rubber bandage which he had introduced for the treatment of ulcers of the leg. He had treated hundreds of cases by these means, and he had no hesitation in saying that it was the only treatment which ought to be adopted in cases of synovitis.

ON THE EARLY RECOGNITION AND TREATMENT OF SPINAL CARIES.

Mr. Edmund Owen, F.R.C.S., London, opened this discussion. He remarked that the affected spine too frequently received no offer of therapeutic aid until its pathological bankruptcy was declared; whereas judicious assistance afforded at the proper time might have spared a shameful collapse. It was lamentable to think that angular curvature should have come to express spinal disease, when surely this deformity was the one sign of spinal disease which our treatment should aim at precluding. He instituted a comparison between the various stages of advancing knee-joint disease and advancing spinal disease, and pointed out in detail the symptoms which were as clearly indicative of early spinal caries before deformity had arisen as were the too familiar symptoms of early joint disease. The patient must be watched in all his movements, and careful inquiry must be made into his habits, to learn if there had been any change therein; nor must it be imagined that the child had lost its usual agility and delight in childish pleasures simply because he had "growing pains" or "rheumatism." There was urgent necessity to give heed to these little matters, which were full of indication and suggestion. They were the straws which showed the direction of the on-coming breeze; when the pathological storm was raging, almost any one could read the weather. We must never refuse to listen to, and search out the cause of, the child's oft-repeated complaint; it must be stripped stark naked, and examined, if need be, on several occasions. As to treatment, the best, he considered, was absolute rest on the back, on a firm, flat, horse-hair mattress, without a pillow. Taken thus at the onset, a few weeks' rest might make the surgeon wonder if his early opinion were correct; if so, so much the better. If the case required longer treatment, then he knew of no better splinting than that afforded by a Sayre's jacket, in the application of which no suspension need be used; but on this he insisted, that if a jacket be put on a child with early spinal disease, the child must still be kept in bed, to insure absolute rest.

(To be continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Gonorrhœa by Injections of Sulphurous Acid Diluted With Water.

Dr. W. D. Wilson writes to the *Lancet*:—

For some time I have treated all cases of gonorrhœa with injections of sulphurous acid diluted with water, and as the results in my hands have been very satisfactory, I write in the hope that others may be induced to give this method a trial.

I do not offer any theory on the subject; I simply state the fact that I have now treated sixteen cases of gonorrhœa, using no other medicine, and they all returned to duty in an average of six days. I have not observed a relapse or any bad effect. The majority of the cases were second attacks, but those suffering from primary attacks of the disease recovered equally fast.

When I commenced this method of treatment I used much stronger injections than I do at present. I find sulphurous acid one part to fifteen of water quite strong enough for most cases. The rules of treatment I recommend are: Place the patient on a low diet, and administer injec-

tions of sulphurous acid diluted in water one to fifteen, three times a day, no other treatment being necessary. I find it is necessary for the attendant to give the injections, for if it is done by the patient it is never well done, most of the fluid escaping back outside the nozzle of the syringe. The injection should be kept in the urethra from three to five minutes. If the patient complains of much pain, or if there is a tendency to chordee, it will then be sufficient to administer the injections once or twice in twenty-four hours.

If these instructions are strictly followed, the purulent discharge will become scanty at the end of the first day, and on the third it will be replaced by a thin, gleety discharge, which also disappears in a couple of days. While this watery discharge lasts I usually administer only one injection daily. I find that the first injection frequently causes pain, which is not so much complained of afterward. I, therefore, in a few cases give the first injection very much diluted—one in twenty, afterwards using one in fifteen. It is necessary to see that the sulphurous acid is fresh and good before it is diluted to the required strength.

The Treatment of Compound Fracture.

In a paper translated in the London *Medical Record*, from the Wien. *Med. Woch.*, No. 10, 1881, Prof. E. von Bergmann states that, in his treatment of penetrating fracture, he deviates from the rules that have been laid down by Volkmann for the management of open fractures in general. Penetrating fracture, by which is meant that form of fracture in which the skin is perforated at one small spot only by the sharp extremity of a fragment of bone, was to be distinguished from open fracture, even before the time of strict antiseptic dressing of wounds; since in the former injury the prognosis has always been far more favorable than that of the latter, in consequence of the smaller size of the wound, and of the less extensive contusion of the soft parts. In dealing with such cases, even when brought to him before the commencement of traumatic local reaction, Dr. von Bergmann does not dilate the wound and endeavor to establish primary disinfection of the injured structures. He restricts his action to careful cleansing, by solution of carbolic acid, of the surface of the injured limb, and to washing out the small wound and removing blood clot. The whole of the limb is then enclosed in salicylic wadding, compressed by an elastic bandage, and finally fixed in a plaster-of-Paris splint. In all of eight cases thus treated, the author obtained good results; although in half of these instances the bone had protruded through the wound, and could not be reduced without some difficulty. In some of the cases there was much laceration of the soft parts, with swelling of the limb and considerable extravasation. In cases of compound fracture with large and gaping wound, the author follows Volkmann's practice of attempting primary disinfection; but this he does with great care, as he does not consider that this practice is absolutely free from bad results. This is indicated by those cases in which amputation has to be performed in consequence of phlegmon about the seat of fracture, which cases, even when terminating favorably, prove, at least, failure of the antiseptic treatment. The author has, moreover, observed one case of fatal septicæmia after such treatment of compound fracture. He is convinced that thorough disinfection cannot be established without risk; and for this reason he thinks that, in the treatment of penetrating fracture, it is well to retain the advantage of having but a small wound to deal with. Much importance is attached, in such cases, to compression of the limb by elastic bandaging, which, as it is applied over wadding, is not likely to do harm. The absorption of extravasated blood is thus much accelerated, and the danger of decomposition much diminished. The most important advantage of elastic compression in cases of compound fracture consists, according to the author, in its favoring the reunion of detached fragments of bone. That such reunion does take place, he has proved both by pathological specimens from man and by experiments on animals.

Gonorrheal Rheumatism.

Dr. A. W. Foot, says, in the Dublin *Journal of Medical Science*:—

The characters which rheumatism modified by gonorrhœa presents are the following:—There is usually less febrile distress; the articular pain is not so severe nor acute; the integument covering the affected joint is apt to retain its normal color; there may be but one joint, and there are not generally many, implicated; the inflammation is confined to the synovial membrane; the eye (sclerotic coat), unlike what happens in ordinary acute rheumatic fever, is often attacked. But the most significant of all signs is finding a running from the urethra, which diminishes when the gonorrheal rheumatism sets in, but which does not cease.

Sir Astley Cooper has given a good account of this affection in his lectures, and says it is not an infrequent disease. There are different ways of explaining the occurrence of joint inflammation in connection with gonorrhœa; some think it merely a coincidence. To this it may well be objected that females seldom suffer from this form of rheumatism. Others hold that it is balsam of copaiva which produces the joint affection. I think the most rational and scientific way of accounting for it is that of Mr. Wilks, who believes that gonorrheal rheumatism is usually a subacute form of a pyæmic inflammation. He considers it analogous to *scarlatinal* rheumatism, which is often nothing less than severe pyæmia, traceable to purulent infection from the sores in the throat, and also comparable to *puerperal* rheumatism, and to the form that sometimes follows smallpox. In support of the pyæmic origin of gonorrheal rheumatism Wilks refers to two cases in which obscure fatal pyæmia proved to have for its cause a gonorrheal inflammation of the urethra, the evidence of this being the discovery of purulent inflammation of the prostatic plexus of veins, while the urethra was full of pus.

Senator considers the most probable explana-

tion is that the inflammatory irritation is gradually propagated from the urethra to the sacral plexus and the spinal cord, where it affects trophic nerve fibres. Gonorrhœal arthritis would thus be assimilated to those articular disorders which occur in diseases of the spinal marrow.

Gonorrhœal rheumatism is commonly situated in one knee joint. In addition to the peculiarities of gonorrhœal rheumatism before-mentioned it should be noticed that the profuse sweatings of ordinary acute rheumatism are not observed, nor are the serous membranes of the heart likely to be attacked, nor does the articular inflammation show any tendency to shift about capriciously or suddenly disappear.

The rarity of the disease in women may possibly be due to the circumstance that their vaginal and urethral mucous membranes (either of which may be affected by gonorrhœal inflammation) are thicker and more tough than the lining of the male urethra.

On Gall Stones.

In an article in the *Medical Press and Circular*, Dr. D. H. Cullimore writes:—

The causes that predispose to the formation of gall stones are: 1st. Old age, on account of the greater quantity of cholesterin in the blood. 2d. Protracted ill-health, when the bile, becoming stagnant, assumes an acid reaction, and is therefore less efficient in keeping the cholesterin, etc., in solution. The acidity of the bile, which is always increased by a meat diet, and never occurs under an exclusively vegetable diet, is an active agent in the decomposition of the chlorate of soda, the principal solvent of the matters—cholesterin, cholepyrrhin, etc., which go to make up the structure of calculi. 3d. Good social position, from sedentary habits and luxurious dietary. 4th. Heredity. 5th. Atheromatous degeneration of the arteries. 6th. Diet. Meat diet in excess undoubtedly conduces to gall stones; but as to the influence of calorefacient food or alcohol, there is no reliable evidence. While on this point I may mention the injurious effect of a long-continued interval between meals, which, by resting the gall bladder, stops the flow of bile, and favors deposits. 7th. Sedentary habits, which accounts for its greater frequency (three to two) in the female than the male sex. Under this head is included confinement to bed on account of illness, fractures, and surgical operations. 8th. Bad hygienic conditions, as shown from the fact mentioned by Glisson, that cows which suffered from biliary calculi in winter, when fed in houses, got rid of them in summer, when put out to pasture. 9th. Anatomical changes in the liver and gall ducts, together with tumors, inflammation, cancer, etc., which, encroaching on the lumen of the ducts, help to cause the retention of bile. 10th, and last, and more frequently than all others, catarrh of the bladder and biliary passages.

This affection is, under all circumstances and in all countries, of an eminently chronic character. It is slow, equally in its dormant state as during its more active and varied manifestations. The usual result is recovery, either by expulsion of the calculi or their solution in the bladder. They sometimes crumble away, and break up into *débris*, from a supposed destructive action of certain bacteria. They are most frequently expelled whole, even under the influence of so-called solvent remedies, as turpentine, ether, etc., whose action is probably more antispasmodic than chemical. Recovery is generally perfect. all stones being expelled, and when relapses recur we cannot be sure it all the original stones were got rid of. Now and again, however, we find ulceration, inflammatory obliteration of ducts, and other complications that lead to permanent jaundice and wasting, followed by death, after periods ranging from six months to two years.

Heat Eruptions.

In a communication to the Atlanta *Medical Register* (formerly the Atlanta *Medical and Surgical Journal*) for October, 1881, Dr. Geo. H. Rohe, of Baltimore, observes:—

For a number of summers past I have had to treat a class of skin troubles obviously depending upon the extreme heat. The clinical features of the eruption are those of simple "prickly heat," together with a number of painful boils scattered over the body. The eruptions, which occur indiscriminately in adults and in children, are most severe in individuals who perspire freely, and from the pain and excessive itching to which they give rise are very annoying. In some cases the affection bears a strong resemblance to certain of the cutaneous syphilides. In the case of a man who came to my clinic at the City Hospital a few days ago, the resemblance to a mixed papular, pustular and tubercular syphilide was so marked as to cause some hesitancy in making a diagnosis. What adds to the difficulty sometimes is that there may be a general glandular enlargement in these heat eruptions, just as in constitutional syphilis. I may remark that glandular enlargement is no more an absolute sign of syphilis than cough is an unfailing indication of pulmonary tuberculosis. I have, not rarely, seen children with pustular eczema of the scalp, whose disease had been diagnosticated and treated as syphilis, for no other reason than that the post-cervical and post-auricular glands were tumid and painful. It may be added that these errors of diagnosis are not always chargeable to the younger and less experienced members of the profession.

The treatment of the heat eruptions here noticed is simple. Cleanliness, light clothing and not too frequent cold bathing relieves the discomfort materially. The boils should be freely scarified, to relieve the hyperæmia, and give exit to any pus or slough they may contain. After bathing, the surface should be lightly dried by a soft towel, and dusted with a simple drying powder of starch or precipitated chalk. Poultices should be religiously abstained from. If any of the furuncular swellings should be very painful and tense, a hot fomentation after incision, continued for about an hour, will be as effective and much more cleanly than a poultice. Internally, the tincture of chloride of iron will, in most cases, be indicated.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The *New England Medical Monthly* is one of the threatened new births for January, 1882. Dr. Wm. C. Wile, of Sandy Hook, Conn, announces himself as editor.

——A reprint from the *American Journal of Obstetrics and Diseases of Women and Children*, for July, 1881, contains a description of a new instrument for uterine dilation, invented by Dr. H. P. C. Wilson, of Baltimore. It consists of two blades, which are made to separate with a screw.

——That eminent sanitarian, Dr. Alfred Carpenter, read a valuable paper before the International Congress, on "The Utilization of Town Sewage by Surface Irrigation." (London: Office Brit. Med. Assoc.) He sums up the matter in nine propositions, and few would dispute his premises or conclusions.

——The *New Jersey Telephone* is the title of a monthly Masonic periodical, edited by William H. Jeffreys, 33°. The first number contains several articles on subjects connected with Masonry, and a poem by a lady, giving a most faithful description of the work at lodge, as well as of the surprise (if they have not already found it out) that the better halves of Masons some day will have in store for them.

——*Godey's Lady's Book* for October is exceptionally excellent in its entire get-up. The steel plate is a scene from Sir Walter Scott's "Tales of a Grandfather;" it is a real gem in its design and execution. A very clever novelette by Clara F. Guernsey, and a large array of well-written shorter stories, poems, and sketches, make the letter-press up to Godey's high standard. The fashion illustrations are new and numerous, and all the departments are worthy of commendation.

——As a writer on yellow fever, Dr. R. B. S. Hargis, of Pensacola, has been known for many years. His experience in the disease has been exceptionally great, and anything he says upon it is deserving of careful attention. Hence we would direct the attention of students to his essay on "Yellow Fever Recognition and Isolation," reprinted from the sixth volume of the Transactions of the American Public Health Association, and also to his "Open Letter to the National Board of Health," relating to the same topic.

——From Dr. Abel Gutierrez, of Nicaragua, we are in receipt of a complete and well prepared thesis on jaborandi, *Ensayo sobre la accion fisiologica y terapeutica del Jaborandi.* He reviews from all the recent sources the contributions to our knowledge of this important drug. He believes that its powers as a therapeutical agent are as yet by no means fully understood, and predicts for it a growing popularity with the profession. Dr. Gutierrez' thesis was prepared for obtaining the doctorate at the University of Guatemala, and in its completeness and neat presentation, gives the reader a favorable impression of the standard upheld by that ancient and renowned seat of learning.

——The subject of dengue fever is one of deep interest to many physicians in the south and southwest sections of our country. It is treated in a very instructive manner by Dr. James Christie, in a reprint from the Glasgow *Medical Journal*, entitled "On Epidemics of Dengue Fever, their Diffusion and Etiology," a paper read at the International Medical Congress. The name dengue, he tells us, belongs to the Swahili language of Zanzibar, and means any sudden, cramp-like seizure. Dr. Christie has seen dengue in its native home in Zanzibar. From his description we doubt if it is exactly the same disease as appears under that name in this country, although Dr. Christie is positive that West Indian dengue, at least, is the same. The question is an interesting one, and we commend it to the attention of our readers resident in districts where dengue prevails.

——Dr. R. J. Nunn, of Savannah, Ga., in a reprint from the *Transactions of the Georgia State Medical Association*, etc., discusses in energetic language the origin of the so prevalent diseases of women. As he tersely sums up his conclusions, we shall let him speak for himself:—

My effort in this paper has been to direct the attention of the profession especially to this subject, to the end that the errors constantly being committed in the physical training and development of young girls—either through ignorance, carelessness or design—may be brought frequently and forcibly to the attention of parents and others having charge of young persons, that a remedy may be found, and that some practical amelioration of these conditions may speedily result.

When it is considered that nearly all uterine distortions result from two causes—First, a weakness of the uterus and its supports, and, Secondly, a force, weak or strong, continued or intermittent, tending to pull or push the uterus out of its normal position—it seems that if we would diminish the number of sufferers from these diseases, we should first strike at the root of the evil, and endeavor to eliminate the causes which bring about certain conditions, which, again, have these diseases as their natural results. This should be some of the work of a true civilization.

BOOK NOTICES.

Health Officer's Annual Report of Births, Marriages and Deaths, for the City of Philadelphia, 1881. pp. 180.

Tabulated and compressed into the smallest possible space, this volume contains a vast amount of valuable information connected with vital statistics, epidemics, meteorology, etc. From a table giving the rate of mortality for the past twenty years, it appears that the same has been gradually though slowly decreasing. The increased death rate of 1880, as compared with the three preceding years, is more apparent than real, as the population of those years had been over estimated, yet there is no doubt but what there was a slight increase. The number of marriages during the year were 6476, or 7.64 per 1000 of population; the births (premature births and still-born excluded) numbered 19,388, or 22.88 per 1000; the number of deaths amounted to 17,711, or 20.91 per 1000. Of still-births (at full term), 870 were returned, and of premature births, only 231. The causes of death in their relation to age and sex, and also to meteorology, are carefully given, and the more important compared with those of previous years. The volume is accompanied by an excellent map of the city, and in every other respect well gotten up and strongly bound in cloth, while the arrangement of its contents reflects great credit on its compiler.

Refraction of the Eye, its Diagnosis and the Correction of its Errors, with Chapter on Keratoscopy. By A. Stanford Morton, M.B., F.R.C.S. Ed. Senior Assistant Surgeon, Royal South London Ophthalmic Hospital. Small 8vo, pp. 57. Price $1.00. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881.

Having become a recognized fact that many heretofore obscure and intractable nervous disorders are due to abnormal refraction of the eye, and therefore readily cured by the use of glasses correcting the same, every physician should be familiar with the methods of examining and prescribing for such cases. By a careful study of Morton's little book no one can fail to acquire the necessary knowledge and skill in this important branch of diagnosis and therapeutics, but as in the several excellent works on ophthalmology, a copy of one of which should be found in the library of every general practitioner, the art of prescribing spectacles receives full attention, it is a question whether there is any real need for such a monograph. We also doubt whether the dioptric system of measurement adopted by the author is any real improvement on the old and well-known measurement by inches. The latter would certainly have been preferred by most American practitioners, except, perhaps, by a few of the junior members of the profession. This has evidently been anticipated by the author, as he also gives the corresponding measurements in English inches, inclosed in brackets, for the convenience of those who prefer it. The work is well written, the rules laid down are brief and concise, and the explanations given simple and lucid.

The Compend of Chemistry. With which is included a Second and Revised Edition of the "First Steps in Chemical Principles." By Henry Leffmann, M.D., Member of the Society of Public Analysts of England; Lecturer on Toxicology at Jefferson Medical College; Demonstrator of Chemistry at Pennsylvania College of Dental Surgery. Philadelphia: C. C. Roberts & Co., 1118 Arch street. 1881. Cloth. Small 8vo, pp. 160. Price $1.25.

Medical students frequently regard chemistry as a great bugbear, and its study is consequently very much neglected in many of our colleges. While it is not necessary that general practitioners should be accomplished chemists, they should, at least, be thoroughly familiar with the principles of chemistry, and in addition possess a sufficient knowledge of the nature and composition of such substances as are usually prescribed as medicines or taken as food, to enable them to prescribe intelligently and to perform the most important tests. Most of the text-books on chemistry are too voluminous and too complicated for beginners, who, for this very reason, often get disgusted, while if the subject was rendered plainer from the beginning, it would be one of the most attractive of the elementary branches of medical education. The work before us contains no more than every physician should know, and know well. The first twenty-eight pages, the author informs us in his preface, are a revised reprint of the "First Steps in Chemical Principles." This is the simplest and best introduction to the study of chemistry that we have ever seen. The next hundred and six pages are devoted to inorganic chemistry. Only the more important elements with their compounds are studied. The subject of organic chemistry occupies only twenty pages. The absence of illustrations would detract somewhat from the value of the book, if used without a teacher, but as a text-book for beginners, studying under proper instruction, it is all that can be desired, and any one who has mastered its contents thoroughly will find no difficulty in entering upon a more advanced course.

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THE ADDRESSES AT THE BRITISH MEDICAL ASSOCIATION.

The opening addresses of the general session and of the various sections of the British Association are interesting evidence of the current tendencies of professional thought and of medical progress. Usually they are upon some "topic of the time," in which not only members of the Association, but the whole medical world is interested.

The address of the President, Mr. BENJAMIN BARROW, F.R.C.S., touched lightly on a number of the issues of the day, such as temperance, vaccination, vivisection, lady doctors, compul sory reporting of disease, the sacredness of the profession, homœopathy, etc. He said in all this little or nothing that is worth quotation. We should judge that he is a highly respectable gentleman, who has never received or uttered a sentiment not endorsed by a large majority of his respectable colleagues; in other words, that he has never had an original nor accepted a novel idea.

Passing to the address in medicine, which was delivered by Dr. JOHN SYER BRISTOWE, whose work on *Practice* has passed to a second edition in this country, we find it entirely taken up with *homœopathy*. It is disappointingly trite. He goes over the old ground, and shows up the futilities of Hahnemannism in terms that must have been long familiar to his audience. Not a single new argument is advanced, and it is difficult to see why he chose this threadbare and barren topic, until one gets nearly to the end of his address. There, however, he had prepared a surprise for his hearers, which must have waked them up from the nap in which, no doubt, many of them were falling. These passages we quote:—

"Homœopathy is a protest against the best traditions of orthodox clinical medicine, and there is a natural tendency among us still to look upon homœopathic practitioners as knaves or fools. But surely this view is a wholly untenable one.

"That all homœopathists are honest men, is more than I would venture to assert; but that in large proportion they are honest, is entirely beyond dispute. It is quite impossible that a large sect should have arisen, homœopathic schools and hospitals have been established, periodicals devoted to homœopathic medicine be maintained, and a whole literature in relation to it have been created, if it were all merely to support a conscious imposture. No, gentlemen; the whole history of the movement and its present position are amply sufficient to prove that those, at any rate, who take the intellectual lead in it are men who believe in the doctrines they profess, and in their mission, and who practice their profession with as much honesty of purpose, and with as much confidence in their power to benefit their patients, as we do. That all homœopathic practitioners are men of ability and education, it would be absurd to maintain; but it is absolutely certain that many men of ability and learning are contained within their ranks."

* * * * * * * *

"I ask you, gentlemen, to forbear with me if I push my arguments to their logical conclusion, and venture now to express an opinion which is opposed to the opinion which many, perhaps most, of you entertain. I do not ask you to agree with it; still less do I ask you to adopt it. But I ask you to consider it; and I am content to believe that, if it be just, it will ultimately prevail. It is that, where homœopathists are honest and well informed, and legally qualified practitioners of medicine, they should be dealt with as if they were honest and well-informed and qualified. I shall not discuss the question whether we can, with propriety or with benefit to our patients, meet homœopathists in consultation. I could, however, I think, adduce strong reasons in favor of the morality of acting thus, and for the belief that good to the patient would generally ensue under such circumstances. I shall not consider

at length whether the dignity of the profession would be compromised by habitual dealing with homœopathists. But I may observe that it is more conducive to the maintenance of true dignity to treat with respect and consideration, and as if they were honest, those whose opinions differ from ours, than to make broad our phylacteries and enlarge the borders of our garments and wrap ourselves up, in regard to them, in Pharisaic pride. I appeal, gentlemen, in support of my contention, to other considerations. It has been held that to break down the barriers that at present separate us from the homœopathists would be to allow the poison of quackery to leaven the mass of orthodox medicine. But who that has any trust in his profession, any scientific instinct, any faith in the ultimate triumph of truth, can entertain any such fear? All the best physicians of old times, all the greatest names in medicine of the present day, are with us; all science is on our side; and we know that as a body we are honest seekers after truth. What have we to fear from homœopathy? Bigots are made martyrs by persecution; false sects acquire form and momentum and importance mainly through the opposition they provoke. When persecution ceases, would-be martyrs sink into insignificance; in the absence of the stimulus of active opposition, sects tend to undergo disintegration and to disappear. The rise and spread of homœopathy have been largely due to the strong antagonism it has evoked from the schools of orthodox medicine, and to the isolation which has thus been imposed on its disciples. If false, as we believe it to be, its doom will be sealed, when active antagonism and enforced isolation no longer raise it into fictitious importance. At any rate, breadth of view and liberality of conduct are the fitting characteristics of men of science."

This proposition, coming from a man of Bristowe's position, was felt as a disagreeable shock by his hearers, and met with little if any countenance or support, either from them or from the writers in the English medical weeklies who discussed his address. The arguments against this plan are so familiar and withal so cogent, that we need not quote them.

No doubt it was the case of the distinguished patient, Benjamin Disraeli, first Earl of Beaconsfield, that stirred up the feelings of Dr. Bristowe, and led him to make a provision for the worst. And what would the worst be? Ah, the London fashionable practitioners have thought of it, but none have dared give this thought its expression. Removed from them by three thousand miles of inhospitable brine, we shall dare to do so. Just suppose that—horrors!—an H. R. H., or—a hundred horrors!—Her Imperial Majesty, should see fit to call in a homœopath—what would the physicians and surgeons in ordinary and extraordinary and extra-extra-ordinary, do? Could they meet him? Think of the general wreck of the code. Could they refuse to meet him? What, offend the august highness and majestic sereneness of the idol of loyalty? Impossible to contemplate it.

This terrible dilemma has also evidently given Mr. Jonathan Hutchinson some wakeful hours. He delivered the address in surgery, and, like all that he does, it is very well done. He points to the rapid progress of specialism, and how this is right and necessary; he referred to the qualifications of the medical practitioner and the increase in them, and turning his attention to Hahnemann, his teachings and his followers, spoke as follows:—

If, however, we may find theme for marvel in the presumptuous self-sufficiency of this would-be reformer, I do not think that we need seek far for the explanation of the success of his teaching. It inculcated faith in drugs, but it changed their form, and gave us cleanly globules and tasteless fluids for the bolus, pill and potion, then in vogue. It supplied a theory of cure, as well as its means; and to the intelligent, but, at the same time, not specially trained, its theory sounded at least as good as those of orthodox physic. The love of novelty conspired with a cheerful faith in the possibility of progress, and with delight in escape from the disagreeableness of the old methods, to draw converts to the new creed. Those converts were not the ignorant, nor were they the poor. No wonder that some from our own ranks should have thought they saw their interest in adopting the new method, and equally little that most of those who observed their conduct held the motives of the man who put "homœopath" on his door to be low and self-seeking. In nineteen cases out of twenty, probably the verdict was right; but when the fiat went forth that a homœopath must be either a fool or a knave, I doubt whether the modesty of nature was not somewhat overstepped. There are fools and fools; and we are guilty alike of unkindness and unfairness if we widen that disrespectful epithet over much, and apply it too freely. There is such a combination of weak power for the estimation of facts with enthusiastic optimism, as regards possible progress, which, while it in no degree establishes a claim to wisdom, yet scarcely brings its possessor into the category of fools. Among the laity, of those who became homœopaths, most were of this character, and some, probably, of those who seceded from our own ranks.

He goes on to say that a surgeon, at any rate, ought not to hesitate to meet a homœopathic practitioner of good standing in his own class,

and strongly hints that even a physician could, without derogation, do the same.

For ourselves, we regard both Mr. Hutchinson's and Dr. Bristowe's opinions on this matter as injurious, if carried out, to the cause of true medical progress, and we shall regret to see them endorsed by any journals or societies. We have sufficiently often, in these pages, stated why no benefit could come to the patient from such a hybrid consultation.

It is more agreeable to hear Mr. Hutchinson set forth the positive gains in remedial measures, in terse and clear language, as in the following paragraph:—

The chemist and the empirical seeker after new drugs may, I suppose, share the pleasure which must come from the knowledge of how iodide of potassium has made curable a whole phalanx of maladies before hopeless, and not the less full of misery because often accompanied by the bitterness of self reproach. The operating surgeon may remember the triumphs of ovariotomy, which has restored, in health, hundreds of mothers to their families. If we could bring together in one place those who, thanks to the ingenuity and industry of Von Gräfe, have been by iridectomy saved from blindness through glaucoma, and are now enjoying the blessing of sight, they would crowd this large hall, and leave no standing room. The abstruse optical researches of Young, Helmholtz, and Donders have borne fruit, in the fact that thousands all over the world, whose sight was comparatively useless, now enjoy it in almost full perfection. The purely practical man may rejoice in remembering how much Sayre's jacket and Martin's bandage have done, and are daily doing, for the mitigation of suffering and the cure of diseases which rendered life a burden. The application of the germ theory to the treatment of wounds has, I doubt not, had for one of its results, among many others, that at the present moment there live, scattered in very distant places, many thousands of able bodied men, the fathers of families, now earning their children's bread, who but for it would long ago have been in their graves. It is true that we as yet see no hope of a cure for cancer, but the pathological doctrine, which is rapidly gaining ground, that many forms are local, and that the pre-cancerous stage should be vigilantly recognized and vigorously treated, is already saving many from becoming its victims.

The address in Obstetric Medicine was by Dr. J. Sinclair Coghill, who is Lecturer on Midwifery in the University of Edinburgh. He gave a carefully written synopsis of some of the recent advances in his specialty. We cannot give room for more than one quotation, which we select partly because it presents some new views, and partly because of its bearing on "maternal impressions," which have been so much discussed of late in the Reporter:—

"There has undoubtedly been latterly a great revival of the former view of the importance of the nervous system in relation to the functions of the other organic systems of the body. More extended researches in microscopic anatomy have greatly tended to this result. The terminations of the nerves have been traced much further than when I published my *Lectures on the Peripheral Nervous System*, in 1859. Klein, in this country, and Frankenhäuser, Kehrer, Koch, Spiegelberg, and others, have shown that there exists a much more intimate organic continuity between the ultimate nerve terminations and the other tissue elements, especially the epithelial, the important bearings of which, both on physiological and pathological processes, cannot be overlooked in its clinical relations. I believe, further—and strict physiological analogy permits the deduction as legitimate—that nerve force may even be discharged free into and affect the fluid contents of the animal cells, and in the same manner influence the blood itself, which, in every sense and purpose, is a living tissue, endowed with the highest organic and functional mobility. It is, perhaps, through this presumed neuro vascular association that we may find the channel by which maternal impressions are conveyed to the fœtus; and it is more reasonable to suppose that the contents of the blood vessels are in this manner directly affected by nerve force than merely by the contraction and dilatation of their walls. I am not aware that this idea has ever been previously suggested, and I offer it with due reserve. The uterus receives the greater part of its nervous supply from the hypogastric branches of the posterior mesenteric ganglion, and partly also from the sacral plexus. The important observations of Patenks, of St. Petersburg, show that these also include the coats of the uterine blood vessels in their distribution.

According to the experiments of Basch and Hofmann, electrical irritation of the hypogastric nerves causes contraction of the circular muscular fibres, under which the uterus descends and the os opens; while, under similar excitation of the sacral plexus, the longitudinal muscular fibres contract and the os uteri closes. These latter observations settle definitely the previous but contradictory views of Spiegelberg and of Frankenhäuser, the former of whom denied motor power to the hypogastrics, and the latter to the sacrals. The cervix uteri is peculiarly rich in its nerve-supply, as might be expected from its exalted sensibility and active functions. As has been pointed out by Dr. Braxton Hicks, the uterus is the only organ in the body whose main nervous supply is derived from the sympathetic, to which we have such access, and which can be so freely handled and examined. It is, indeed, a great example of the decentralization of that system. Dr. Reimann, of Vienna, found that the uterus separated from the cerebro-spinal axis, and also when removed from the body, responded to irritation by peristaltic and rhythmical movements of the whole organ, even when only

a portion of it had been irritated; that also, removed from the body, but maintained at its normal temperature, it exhibited systolic movements for an hour after the death of the animal. The uterus has, then, an independent ganglionic system connected with, and therefore influenced by and reacting through, the cerebro-spinal system, but organically related to and derived from the sympathetic. The arrangement and distribution of the uterine blood vessels is peculiar to that organ, as shown by the investigations of Rouget and Snow Beck. The arterial and venous systems freely anastomose, and seem more dependent on the contractility of the permeated tissues than on the elasticity of their own walls for propelling the blood. Hence the effect of general debility, or, on the other hand, of hyperæmia, in causing or favoring uterine congestion and hemorrhage. This anatomical peculiarity of the uterine vascular system has important bearings on the occurrence and treatment of parturient and other forms of uterine hemorrhage.

The address in the Section on Medicine was by Dr. E. L. Fox, of Bristol, and was occupied with the relation of the conditions of the blood and blood vessels to the health of the tissues, following Virchow's theory that the initiative in diseases of the textures of the body lies in the texture itself, and not in the blood conveyed to it; and modifying it by pointing out the influence exerted by varying calibres in the blood vessels of a part.

Mr. W. Martin Coates, in the address before the Section on Surgery, described an operation for the removal of internal piles, by means of some instruments devised by himself.

The Section of Public Medicine was opened by Dr. Arthur Ransome, of Owens College, Manchester, who enjoys a deservedly high reputation in this branch. He spoke of the need for a systematic study of epidemic diseases, and formulated the requirements for this study in the following measures:—

1. There would be needed an army of well-trained observers; for it would be hopeless for any single man, or even for any small body of men, to undertake such a gigantic task.

2. We should require continuous and accurate observations of epidemic diseases, taken at sufficiently short intervals, and having regard to both mortality and sickness; the cases recorded being accurately ascertained, both as to time and place of origin.

3. These observations would have to be collected and collated by some central authority.

4. Comparisons would need to be made between these records and certain concurrent circumstances.

5. Local inquiries must be carried out, and directed to the mode of origin of the epidemics, their incidence on different ages, sexes, and occupations, their fatality at different periods, their several varieties; and, finally, their pathology, and their relations to other forms of disease.

6. There would further be needed experimental and other researches on the intimate nature of contagion, and on the microscopic forms associated with each disease.

7. There would remain various geographical, anthropological, and even historical questions, that would need to be investigated before our knowledge could be considered as complete.

Although, of course, all these means are not yet available, we should try to make them so, and the lecturer pointed out the great public advantages of such efforts.

Notes and Comments.

Treatment of Smallpox by Ether and Opium.

In a recent séance of the Academie de Medecine, M. Du Castel read a memoir on the above subject. In his service in the Hôpital St. Antoine he observed seventy-six grave cases; thirty-six among these, having confluent small pox, were treated in this way. In almost all the cases suppuration did not take place, and desiccation occurred from the sixth to the ninth day. The following observations may be taken as typical: A girl of twenty-two entered the service on the day of the eruption, with grave general condition, extreme agitation, skin scarlatiniform in color, and covered with small papules placed very near each other. Temperature 40° (Centigrade).

The next day the contents of a hypodermic syringe of ether was injected; fifteen centigrams of thebaic extract and fifteen drops of sol. ferri perchlorid., in 125 grams of water, was administered.

On the 26th inst. (three days later) a few scattered vesicles were formed; desiccation took place without suppuration, and was complete two days later.

The risk of abscess following the ether injection is avoided by inserting the needle deep into the tissues.

This treatment appears much more efficacious in vaccinated persons.

The best method of applying the treatment is to inject the contents of a hypodermic syringe of ether morning and evening, giving fifteen to twenty centigrams of extract thebaic and fifteen drops of sol. ferri perchlorid., much diluted, in the course of the day. M. Du Castel, in concluding, hoped that further research would be devoted to the subject.

Distribution of the Branches of the Lumbar Plexus.

At a recent meeting of the Société de Biologie (July 30th), M. Paul Bert gave the results of researches undertaken in collaboration with M. Marcacci, regarding the final distribution to the muscles of the nerves of the lumbar plexus.

Two hypotheses have been put forward on this subject: 1. Is each muscle animated by a branch having origin from several roots? or, 2. Is each root connected with several muscles, so that it controls one group only of extensors, flexors, etc.?

From experiments on the lumbar plexus in the dog, M. Bert is led, by the results of his extensive researches, to consider the second hypothesis as best founded.

In effect the first root of this plexus presides over the contraction of the sartorious, the anterior rectus and the psoas; that is, over the flexion of the thigh on the pelvis. The second radicle controls the movements of the anterior part of the vastus externus, of a portion of the tensor fasciæ and of the vastus internus; it directs the extension of the leg. The third root sends branches to the remaining portion of the vastus externus and to the anterior part of the triceps. The fourth root is distributed to the posterior part of the biceps, the semi-tendinosus and the semi-membranosus, and to the second and third adductors. This root, then, controls a double movement—extension of the thigh and flexion of the leg on the thigh. The fifth root in the dog is destined to the movements of the entire tail.

From these experiences it is possible to class the muscles in groups innervated by different motor roots; to each department corresponds one particular root, and this latter responds to a medullary centre limited to its point of origin.

Infantile Inebriety.

Dr. J. H. Musser reports, in the Philadelphia *Medical Times*, a case of acute alcoholism in a boy, aged four years, whose mother keeps a small grog shop. At 4 P. M. on the 27th of July last she found her little son behind the bar, draining a tumbler, which it was afterwards ascertained contained four ounces of whisky, of its contents. In fifteen minutes he was stupid, and in fifteen more he was unconscious. According to a neighbor's statement, at 6 P.M. "he was like death," pale and cold, with a cold, clammy perspiration on face and body, with an excessively frequent and very feeble pulse, and breathing heavily. He was placed in a hot mustard bath and rubbed with whisky. Reaction set in in an hour. Not regaining consciousness, however, the doctor was sent for. He saw him at 11 P.M. in the following condition: Skin hot, dry, red; extremities warm; temperature 102½°; respirations 44, not stertorous; pulse 140, quick and small; completely unconscious; conjunctivæ insensible; pupils contracted and insensible to light; general anæsthesia. After considerable effort emesis was brought about; food and a large quantity of a pink-colored mucus and fluid were discharged. The breath and the vomited matter were of a strong alcoholic odor. After vomiting he could be slightly aroused, but consciousness returned gradually, and he did not recognize his mother until 6 A.M. of the next day. That day a foul tongue, no appetite, and an irritable temper were the only symptoms noted.

According to the doctor's statement, this boy has frequently been tipsy, and smoking the strongest cigars has been a daily luxury with him for more than a year.

Ergot in Tuberculosis.

A writer in the Cincinnati *Lancet and Clinic* suggests, on theoretical grounds, the use of ergot in the early stages of tuberculosis, with a view to prevent the formation of tubercular deposits. "We know," says he, "that ergot contracts blood vessels. Would it not be possible that, by giving ergot as soon as we are aware of tubercular matter being formed, it would contract the blood vessels and prevent the exudation and somatic condition of the blood vessels' walls? Even if ergot is given later on in the disease, and deposits have taken place, if we can stop the further progress of the disease, the deposits that have already been formed are likely to undergo fatty or calcareous degeneration, and do no harm. It might be possible that by the action of ergot in conjunction with alcohol and cod-liver oil, it might be of some benefit, if nothing more."

We hope he will try it, and then let us know the result.

Epilepsy Caused by Menorrhagia.

According to Dr. William A. Hammond, in the *Medical Gazette*, October 1, 1881, epilepsy is rarely caused by menorrhagia, it being generally the case that when associated with menstrual disturbance it has a suppression of the function or a diminished flow as its cause. Not infrequently, also, epilepsy which may have existed from early childhood ceases when the catamenia make their appearance.

The following case he therefore regards as specially interesting: Miss S., 18 years old, was of good health till the occurrence of her catamenia, during her fifteenth year. While the discharge was at its height, and apparently the function was being performed with entire regularity, she was suddenly seized on awaking in the morning with an epileptic paroxysm of great severity, during which she foamed at the mouth, was violently convulsed, and bit her tongue badly. From this time on, with each successive menstrual period, she had an epileptic convulsion, and, as her periods came round with perfect regularity, she had had about thirty seizures when she came under observation.

Upon careful examination the Doctor could discover no ovarian tenderness, and he was about to send her to a gynæcologist for a more complete search for some cause connected with the generative system when, in answer to his question, she informed the Doctor that the discharge was very profuse. Upon this hint he acted, and advised that for a week before the next expected menstrual period she should take a teaspoonful of the fluid extract of ergot three times a day, and continue the medicine during the whole time of the flow. In a couple of weeks she returned and reported that she had faithfully followed his prescription, and that she had passed through the whole of the last period without the least sign of an epileptic seizure, and also that the quantity of the menstrual discharge had been greatly diminished. She has continued to pursue this treatment up to the present time, though a year has elapsed, and she has had no return of the epilepsy.

In this case the Doctor thinks that the convulsions were due to cerebral anæmia, consequent upon the excessive loss of blood; and the ergot, by diminishing the flow, prevented the consequent deprivation of blood to the brain.

How to Prevent the Formation of Sediment in Magendie's Solution.

According to Dr. Walter P. Gillette, of New York, in the *Medical Record*, Magendie's Solution may be preserved for an indefinite period by the addition of two drops of carbolic acid to an ounce of the solution.

Having adopted this combination about ten years since, the Doctor states that he has not had an abscess, nor even a cellulitis, form from the result of a hypodermic injection of morphine. The device was given to him by a physician addicted to the morphine habit by the hypodermic method.

He had been a frequent sufferer from abscesses until he set to work to study the flocculent deposit in Magendie's solution, after it has been prepared a few days. This deposit, he said, was a vegetable fungoid, which could be distinctly observed under the microscope, and was, in all probability, one of the irritating causes which light up suppurative cellulitis, in the course of hypodermic injections of this liquid.

Nitrite of Ethyl as a Disinfectant.

In the *Jour. de Med. de la Haute-Vienne*, M. Peyrusson proposes to purify the air of hospital wards, sick rooms, etc. by the vapors of nitrite of ethyl, which are diffused in the atmosphere from a mixture of alcohol and nitric acid.

These two ingredients may be placed in porcelain capsules, saucers, etc., and gently heated by placing them in hot water.

But he has found it necessary to change the proportions of the ingredients usually directed for the preparation of these ethers, so as to avoid the development of acid vapors; he generally employs the following mixture —

℞.	Alcohol at 90°,	4 parts.	
	Nitric acid at 36°,	1 part.	M.

In these proportions the alcohol is in great excess, saturates completely the acid vapors, which are nevertheless more active, being just in the act of formation at the moment they undergo decomposition through the impurities of the alcohol.

This system, thus simplified, would be of great utility in the hospitals, maternities, etc., for 50 grams of this mixture would suffice for 100 cubic meters of air, and the capsules containing it could be placed at intervals in the ward.

Finally, this mode of purifying the air, which is inoffensive and agreeable, destroys the volatile bodies which produce infection, and is the only substance which acts on the germs of fermentation and putrefaction, sometimes contained in large quantity in the air, particularly in hospital wards. This means may then render great service against these myriads of infinitely small organisms which attack us on every side, and are the primary cause of contagious diseases.

Nitrate of Lead in Ulcerated Cancer of the Uterus.

M. Cheron, in the *Revue des Maladies des Femmes*, remarks that he was led to employ nitrate of lead in the treatment of ulcerated epithelioma of the cervix uteri, by the good reports from Italy regarding the benefits obtained from this drug in ulcerated cancer of the organ.

The ulcerated surface is first touched or cleansed with a tampon of charpie dipped in glycerine, and then, after the injection of a litre of water, containing five grams of perchloride of iron, if there is any slight flow of blood, as frequently happens, the surface is dried with charpie; then the nitrate of lead, mixed with lycopodium, forming a powder, is dusted over the surface, and a tampon of cotton wool introduced to retain the powder in place.

The best mixture is the following:—

R. Plumbi nitrat. pur., ℥ ss
Lycopod. pulv., ℥ j. M.
Et ft. pulv.

Under the influence of these applications, suppuration becomes considerably diminished, as also the bad odor. Hemorrhage even becomes suppressed. After twelve or fifteen dressings, the engorgement in the culs-de-sac is not so marked, and the general health is decidedly better. In fact, nitrate of lead seems capable, among so many useless remedies, of rendering great service in epithelioma of the cervix.

Correspondence.

Medication in Yellow and Pernicious Fevers.

[We publish, at the request of a correspondent, extracts from the following letter, believing that its suggestions merit consideration. It was addressed to Dr. R. H. Day, of East Baton Rouge, La.—Ed. Reporter.]

Doctor:—* * * From my experience also with malignant congestive fever in former years, in the South, I was impressed with the great advantage of the combination of calomel with quinine, in arresting the fatal recurrence of the paroxysm; and in numerous cases of what is styled in Brazil pernicious fever, I have had occasion to note the salutary effect of this combination.

The efficacy does not depend upon the administration of calomel and afterwards of quinine, but in the introduction of these agents conjointly into the system; and if a word from me can avail anything with those who are in a position to test this mode of practice, I would urge upon practitioners not to delude themselves with the idea that the same results can be obtained by a resort to these articles consecutively.

Those who have used them after this order in epidemics of yellow fever without the desired result, may suppose that it is quite unnecessary to vary their plan by conjoining them in the same powder or pill. But I am so thoroughly convinced that the effect of their united action is quite different, and far more beneficial, that I hail the appearance of the recommendation made in your article as a new era in the treatment of yellow fever, which no one should disregard. Let us try, it with faith in its virtues, and should it fail in some cases, it is only left for the practitioner to reflect that nothing else affords a better prospect of success, and his conscience may rest easy in having adopted a reasonable and safe measure for the arrest of an otherwise fatal disease. Those who have had the most varied clinical experience should not reject this simple expedient, in view of the salutary results reported by you.

In April, 1876, there occurred in this city some serious cases of disease with all the characteristics of yellow fever, even to the appearance of black vomit, in the fatal termination of a large proportion, in which this combination of calomel and quinine was instrumental in saving the few cases which escaped. I have also employed it in cases that were brought here from the hotbed of yellow fever, at Santos, with salutary results.

The great advantage of the treatment consists in its applicability in like manner to all the grave forms of malignant bilious fever that may appear synchronously with yellow fever, and hence the propriety of resorting to it without the necessity of a well defined diagnosis.

It may be held as unwarrantable by the more scientific nosologists to adopt any course of treatment prior to a clear and distinct declaration of the characteristics of a disease, and as the black vomit is, perhaps, the only unmistakable symptom of yellow fever, the theory of all such would require us to await its development before deciding upon a special medication. But in the common sense view of most practitioners, the indications would be sufficiently clear very early in every case occurring in a yellow fever district, to adopt this recourse, and as you have remarked, it may be resorted to at the outset of the hot stage with the same result of cutting it short and terminating all danger from the further progress of the disease. It thus turns out that "when ignorance is bliss 'tis folly to be wise," and the road is so plain that "the wayfaring man, though a fool, cannot err therein." I take it that all else that may be done in a case of yellow fever belongs to the class of palliatives; and if this radical measure of twenty grains of calomel with thirty grains of sulphate of quinine, divided into four doses, of which one is given every two hours, seems to arrest the paroxysms, the subsequent treatment will be of comparative indifference.

Yet holding that your suggestions are judicious in regard to the measures to be adopted, I beg to submit a modification of one part of the routine adopted for the relief of irritability of the stomach, and propose a formula which has given the most satisfactory proof of its efficacy, viz: Lime water three ounces, camphor water two ounces. mint water one ounce, of which one or two tablespoonfuls may be given every half hour, with longer intervals when improvement in this symptom occurs. While the morphine, mint water and bicarbonate of soda may be applicable to the greater number of cases, it may be that the above will afford relief in some cases when this fails, and hence it should be remembered by those entering the contest with this terrible antagonist. J. McF. Gaston, M.D.

Campinos San Paulo Brazil.

A Strange and Dangerous Course taken by a Bullet.

Ed. Med. and Surg. Reporter:—

John Lenaham, of Centralia, Pa., æt. 20 years, stout, strong, and robust, came to Ashland, a town about two miles distant, on Saturday evening, the 17th inst., with another young friend of about the same age, and while there they purchased a revolver (Smith and Wesson, calibre No. 32), and while on their way home in the evening the pistol was accidentally discharged, while the young man was about six yards behind him. He was immediately taken home in a carriage, and there two local physicians were called in to see him. They did considerable probing and cutting of the surface tissue in their efforts to find the location of the bullet. After working hard for some time they gave the matter up as a bad job, thinking the missile had entered the thoracic cavity, "and thereby perforated the lung," owing to the fact that the patient had expectorated some blood, which they said was very red in color, and he had some difficult breathing, with cough. I was called in to see him about twenty-four hours after the accident, and I found that the bullet had struck the ninth rib, about one inch to the left of the spinous processus of the dorsal vertebra, and then glancing outward and upward, passed under the scapula, and under the coracoid process and clavicle; I found it embedded deeply in the pectoral muscles. I made an incision about two inches in length over the location and found it embedded about one inch in depth, from which I removed it without much difficulty. The next forty-eight hours he suffered with considerable traumatic fever, caused by fright and pain, but now he is improving rapidly without any other complication. I attribute the expectoration of blood to the injury the lung received from the rib being suddenly sprung against it when the bullet struck it. He is at this time able to get out of his house.

Ashland, Pa. William R. Owen, M.D.

Rupture of the Bladder, With Recovery.

Ed. Med. and Surg. Reporter:—

In your journal, No. 10, are published two cases of rupture of the bladder, which prompts me to report a case occurring within my own practice:—

In August, 1880, Mrs. T., of Oakdale, was stepping upon the steps at the entrance of a neighbor's house, when she lost her balance, and fell back, striking the ground on her hip, a distance of about two feet. Soon she began to feel a sickening sensation, and distress in the lower part of the bowels and back. She kept around, however, sufficiently to prepare supper for her husband, but could eat nothing herself. She passed a restless and painful night. The next morning she sent for her physician, Dr. Osler. He recognized some severe internal injury, but could not determine the extent. She had not passed water since the accident, although she had the desire to do so. The doctor introduced the catheter and drew off over an ounce of urine. During the day there was vomiting several times, and towards evening subsultus, thirst, with increasing tenderness, and she was evidently growing worse. Thirty hours after the injury I saw the patient with Dr. Osler. Found the pulse 120, skin inclined to moisture, anxious countenance and hiccough. There was tenderness and considerable fullness in the region of the bladder, but no extended tympanitis. The catheter was again introduced but it drew only a few drops of urine. The bladder was completely flattened over the swelling or tumor beneath. The uterus was explored, and found of normal size, but moved to the right side. By this time we were satisfied there was rupture of the bladder, and we informed the husband of the almost certain fatality. Further vaginal examination revealed a tumor posterior to the os uteri, having a distinct fluctuation. Into this an exploring needle was inserted, which settled the diagnosis. A larger incision was made, by which about two pints of sero-purulent urine escaped. Manifest relief soon followed. The next day the graver symptoms had subsided, and the case appeared more hopeful.

After this time she remained under the assiduous care of Dr. Osler, who treated her with carbolic acid wash, the frequent use of the catheter as a drainage tube, and opium and quinine internally. She recovered in eight weeks, having had one slight relapse of fever during the time.

Mrs. T. was about forty years old, light complexion, and inclined to be fleshy, and has had several children. As there were but few symptoms of peritonitis, it is fair to conclude that the rupture in the bladder was chiefly or wholly outside of the peritoneum, which let the urine escape into the pelvic connective tissue.

Of over fifty cases of this injury mentioned in Holmes' System of Surgery, all were fatal, but three. Of the three which recovered there was only one in which the rupture and urine extended within the peritoneum. A. T. Hudson, M.D.

Stockton, Cal.

A Double Monster.

Ed. Med. and Surg. Reporter:—

In November last Dr. John T. Sims, of this county, was summoned to attend Mrs. ——, a multipara, in labor. The only thing unusual in her condition was the fact that she had been having repeated attacks of chill and fever for some weeks previous, and was from that cause considerably prostrated. She had, according to her computation, arrived at full term. The pains were frequent and forcible, and an examination per vaginam revealed a natural presentation of the vertex and everything indicative of a speedy delivery. Soon the head was distending the vulva, but after this there was no further advance, notwithstanding the pains continued or were increased in frequency and force, aided by the expulsive efforts of the woman. The doctor made repeated examinations and could detect no cause for the sudden arrest of the advancing head. Having no instruments of any kind with him, he made such traction as he could with his fingers hooked around the vertex as best he could, but still there was no advance. He then requested that Dr. George W. Farrar, of Dawson, be sent for, to aid him in the delivery. It being near ten miles from the patient's house to Dawson, it had

been eleven hours that the head had been in that condition when Dr. Farrar reached the patient. He also carried no instruments with him. Finding the woman almost exhausted, it was decided that it would not be safe to wait until they could send for an obstetrical case of instruments. Dr. Farrar succeeded in passing a section of a common roller bandage, about one inch in width, up the side of the fœtal head and across the inferior maxillary, and bringing it down on the opposite side of the head, then grasping both ends of the bandage and using considerable traction, he succeeded in delivering the head. Upon passing his fingers up beside the neck of the fœtus he was surprised to find another head presenting, and to his still further surprise it descended in advance of the shoulders which he was trying to extract, and was soon delivered. Soon afterwards the entire child or children were extracted, stillborn. They presented the following appearances: There were two well formed, well developed heads, rather larger than the average; two perfect faces; two necks; two spinal columns down to one common sacrum, two sternums, and to appearances there are two complete pairs of lungs, and two hearts; a common abdomen, with probably only one set of digestive organs; one pelvis, and two inferior extremities. There are only two superior extremities visible, both perfect in all respects; one from each outside shoulder, right and left. At the proper place between the two necks there is a third or common shoulder that answers for each head; there was only one umbilicus. The cord and placenta were rather larger than is usual. After the cord was cut and the placenta removed, the child or children weighed eighteen pounds.

The mother died on the eighth or tenth day after delivery, from exhaustion; possibly as much from malarial poisoning as from the delivery. As this child or children are so perfectly developed, I have no doubt, could they have been promptly delivered, but what they would have had as good a chance for life as ordinary children. I further concluded that it was entirely practicable to have delivered them promptly with an ordinary obstetrical forceps, but unfortunately, it is a custom with most of the physicians of this vicinity never to carry any obstetrical instruments with them when called to a case of labor, trusting to sending for them when needed. In fact, very many of them do not own any, and rely upon borrowing from their neighboring brethren, when they are so unfortunate as to need them. *Dawson, Ga.* C.

News and Miscellany.

Law Prohibiting the Sale of Ecbolic Medicines.

A bill is pending before the Missouri Legislature, presented by Hon. Lewis Myers, for the purpose of preventing the indiscriminate sale of abortifacient medicines.

Section 1 provides that no known ecbolic medicine shall be sold or given away, except upon a written prescription of a physician.

Sec. 2 provides that a record shall be kept of the sale of any such medicine.

Sec. 3 prohibits the sale of all drugs "designed expressly for the use of females," until two physicians have examined them and pronounced them non-ecbolic.

Sec. 4. No publisher or printer of any newspaper, or any other person, shall, directly or indirectly, advertise any pills, mixtures or powders, designed expressly for the use of females, before receiving a certificate from two or more respectable and legally authorized practicing physicians of this State, to the effect that said mixtures, powders or pills are not ecbolic or abortifacient in their action or effect.

Sec. 5. Any person failing to comply with any of the provisions of this act shall, upon conviction, be fined not less than fifty nor more than two hundred dollars, to be recovered by indictment or information, as now provided by law in cases of misdemeanor. And in case the death of any person shall result from the use of any ecbolic or abortifacient medicines, pills, powders or compounds, sold or given away, in violation of any of the provisions of this act, the person selling or giving away the same shall, upon conviction, be punished by imprisonment in the penitentiary not less than two nor more than ten years.

Sec. 6 provides that physicians furnishing ecbolic medicines to pregnant females will be guilty of felony.

The provisions of this law were drawn up by Dr. A. W. Sawyer, of Arbela, Mo. While the design is praiseworthy, we do not believe, as drawn, that it will prove effective. Quinine is an ecbolic, according to many authorities. Shall its sale be prohibited? When publishers of newspapers advertise patent medicines, is it practicable for them to obtain certificates of their composition? We doubt it.

The President's Case.

The case of our lamented President has, with questionable taste, been continued, in "personal statements' in the journals, both medical and lay, after his death and before the publication of the official record. It is, however, no doubt, a matter of pride with some energetic editors to obtain these statements, and whatever is justly due them on this score they should have.

The *Medical Gazette* was first in the field, with the personal statement of Dr. Hamilton. This, it should be said, was merely a verbal answer to the inquiries of the representative of the *Gazette*, and gives his views as to the position of the assassin, the cause of the mistaken opinion as to the location of the ball, and the general treatment.

Later, by some issues, we have Dr. Bliss' statement in the *Medical Record*, written, he says, for the profession, but advance proofs of which were sent to numerous daily newspapers, etc. ! ! He excuses his conduct toward Dr. Baxter by the plea that the President asked him (Bliss) to take charge of the case; or, more accurately, that he asked the President whether he should do so, and the President signified assent. If this plan of obtaining patients is to be approved and adopted, let it be generally known. It is an easy plan.

Dr. Boynton, we understand, also had a

"statement" ready, but at the request of Mrs. Garfield, has withheld it, for which they both deserve credit. There will be a correct official record presented to the public in due time, and these one-sided histories are prompted more by love of notoriety than scientific enthusiasm, and as such would have been better left in manuscript for the present.

German Sanitary Congress

The German Sanitary Congress was opened in Vienna on September 15. The post of President was taken by Duke Theodore, of Bavaria, Doctor of Medicine, and brother of the Empress Elizabeth, who delivered an inaugural address. A Vienna telegram states that, besides a considerable number of German and Austrian sanitarians, two Russian professors—Moskievits, from Warsaw, and Eigmann, from St. Petersburg—are present, together with two lady doctors from Russia. The chief subjects of the papers and discussions are epidemic diseases, disinfection, the management of and attendance at funerals, water, school hygiene and public soup kitchens.

New Preparations.

PACKER'S TAR SOAP.

A convenient and neat method of applying tar is always a desideratum in practice, and from our experience with it, we can say that "Packer's Tar Soap," will be found just the article wanted in the numerous cases of skin disease in which tar is introduced. It has been and is used by many of our best dermatologists, and they commend it strongly.

American Ovariotomies.

Dr. Horatio R. Bigelow, Washington, D. C., is preparing a paper on American ovariotomies, and will be glad to receive from the profession full reports of all such cases. Dr. Bigelow's address is 1502 Fourteenth street, Washington.

The Tri-State Medical Society

Holds its Seventh Annual Meeting in St. Louis, October 25th, 26th and 27th. Dr. H. C. Fairbrother, East St. Louis, Chairman of Committee on Arrangements; Dr. G. W. Burton, Mitchell, Indiana, Secretary.

OBITUARY NOTICES.

—We learn, with sorrow, that Prof. William Warren Green, of Portland, Maine, who was a delegate to the International Medical Congress, died on his way home, and was buried at sea. Dr. Green was well and favorably known as a surgeon, teacher and writer.

—Professor James P. White, President of the faculty of the Medical Department of the University of Buffalo, died in that city, on Wednesday night, aged 71 years. Professor White was a graduate of Jefferson College, in this city.

—Charles A. Spencer, well-known in Europe and America as an optician, microscopist, and manufacturer of telescopic lenses, died in Geneva, New York, on Wednesday evening, aged 68 years.

QUERIES AND REPLIES.

Tabes Dorsalis.

Mr. Editor:—I have a young lady patient who has been suffering between two and three months with what I call *Tabes Dorsalis;* with the best treatment I have been able to give her, she improves but slightly. Her general health and appetite are commonly good, but she has no use of the right lower limb. Will some one who has had experience in these troubles advise.

W. T. B.

Dr. W. C. F., of Pa., asks: What chemicals added to heavy petroleum will cause it to saponify?

Ans. No chemicals added to petroleum will cause it to saponify. Heavy emulsions have been obtained by accident or otherwise, through the aid of alkalies; for example, a tank of petroleum, after the process of refining with sulphuric acid, was made almost solid by adding a too large proportion of soda ash, used to neutralize the acid remaining in the oil. The operator *thought* he had saponified the petroleum, but *found* he had only made a heavy emulsion.

MARRIAGES.

FOULKS—THOMAS.—In Philadelphia, August 18th, 1881, by the Rev. W. S. Pugh, William C. Foulks, M.D., and Mary E. Thomas.

JANVRIN—LA WALL.—At Easton, Pa., Sept. 1st, at the residence of the bride's parents, by the Rev. F. W. Hutford, J. E. Janvrin, M.D., of New York, and Laura L., daughter of Cyrus La Wall.

MINER—HAND.—On Wednesday, Sept. 14th, 1881, at Brainard Church, Easton, Pa., by the Rev. A. Russell Stevenson, and the Rev. Dr. T. C. Porter, LL.D., Joshua L. Miner, M.D., of Wilkesbarre, Pa., and Annie K. Hand, daughter of the late Rev. A. H. Hand, D.D.

PEARSONS—ALLEN.—In Irasburgh, Vt., August 16th, by Rev. Lawrence Phelps, assisted by Rev. William Carr, J. A. Pearsons, M.D., and Finette I. Allen, both of Barton, Vt.

ROYER—COOKE.—On August 18th, at Lincoln, Lancaster, Pa., by Rev. Mr. Schwitzer, A. S. Royer, M.D., of Ephrata and Miss Emily Cooke, youngest daughter of the late Charles Cooke, of Philadelphia.

TARR—McNUTT.—August 10th, 1881, at Pittsburgh, Pa., by Rev. David Harges', of Wellsville, O., Morris C. Tarr, M.D., of Irondale, O., and Miss Jessie F. McNutt, of New Waterford, O.

WAKEFIELD—JOHNSON.—In Ludlow, Vt., Aug. 10th, by Rev. A. J. Hough, Solon R. Wakefield, M.D., of West Salem, Wis., and Mary E. Johnson, of Ludlow.

DEATHS.

AMERY.—In Cincinnati, Ohio, on Wednesday, Aug. 24th, 1881, at ten minutes to four o'clock, P.M., Samuel A. Amery, M.D., aged 37 years, 3 months, and 23 days.

CARPENTER.—In New York, Sept. 1st, 1881, Elijah W. Carpenter, M.D., aged 67 years.

DALTON.—On the 26th inst., G. E. Dalton, M.D., aged 36 years, son of G. E. Dalton, M.D., of Cincinnati, Ohio.

HAND.—In Cincinnati, Ohio, suddenly, on the morning of the 1st inst., of paralysis of the heart, Francis C. Hand, M.D., son of James C. and Anna M. Hand, in the twenty-ninth year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1286.] PHILADELPHIA, OCTOBER 22, 1881. [Vol. XLV.—No. 17.

Original Department.

Lecture.

HYSTERIA AND RHEUMATISM.

Clinical Lecture, delivered at the Neckar Hospital,

BY M. POTAIN,

Professor of Clinical Medicine in the Paris Faculty.

Translated for the Medical and Surgical Reporter.

Gentlemen:—In bed No. 20, of the St. Adelaide ward, is a patient with a very interesting history; during the last months the symptoms she has presented have been so complex that they have completely puzzled a very able physician, so much so as to cause him to formulate successively the following diagnoses: Meningitis, suppurating otitis, typhoid fever, hysteria, rheumatism; his treatment was without beneficial effect. The patient but yesterday entered the hospital, and, by a very remarkable coincidence, the treatment we have instituted in accordance with our opinion regarding the diagnosis of the case has, by the unhoped for effects already obtained, assured us of the exactitude of our suppositions.

The patient is a woman, thirty years of age, mother of two children. Her health is generally good and she is of robust constitution. During her early years she was somewhat nervous, but without any special symptoms. Four or five years since she suffered from attacks of which she can give no very good description, she was a prey to violent agitation, accompanied by delirium and unconsciousness; all phenomena, very probably, of hysteric nature. Since recovery from these attacks she became much more nervous than before, more impressionable; weeping without adequate cause, very easily irritated; and this state was aggravated by increased fatigue and family troubles.

Pain in the head caused her great suffering, and gradually became worse. One day, after washing clothes for some time at the river, she became somewhat chilled, and the pain from which she had long suffered, on the left side of the head, became almost intolerable; in leaving the washing-boat she was obliged to cover that side of the face, to avoid contact with the air. Eight days later she returned to wash at the same boat, and working vigorously she became heated, and while in this state she was completely wetted by the falling rain, in returning to the house; her head, being uncovered, suffered particularly.

That evening she suffered from very intense pain in all the left side of the head, face and neck; the slightest movement rendered the pain almost intolerable, so that eating was impossible, and liquids were swallowed with difficulty.

There was no fever. In the midst of the attacks vomiting of blood supervened; the ear and the external meatus became painful; the anguish continued unabated, notwithstanding energetic and varied treatment. Chloroform simply suspended the pains during the duration of the anæsthesia; very shortly after the pain was as marked as before the administration of the drug. It is under such conditions that the patient presented herself, on her entrance into the hospital. There was complete apyrexia; the pulse was feeble, but normal; there was no trouble of respiration. The pain in the head was intense, and particularly localized at the sinciput, so much so that the head had been shaved and a blister applied at this point, from which the pain extended

to the occiput and external ear, which was very sensitive. The pain was continuous, but with exacerbations from time to time, particularly when the least pressure was made over the painful parts. Cutaneous sensibility was diminished over the entire left side of the body, with anæsthesia and analgesia of the same side.

At the same time the organs of sense seemed to participate in the abnormal state; the sight was not clear; the ticking of a watch was not heard at the left ear; the patient was unable to recognize the odor of vinegar; taste even did not seem normal.

All the movements were intact, with the exception of a little peculiarity, which led me formerly to suspect simulation, but which I have since observed with sufficient frequency to merit mention.

When, after covering the patient's eyes, the left hand of the patient is touched with the extremity of the fingers, the hand opens and seizes vigorously first the fingers and then the hand of the observer. This fact proves, then, that anæsthesia really exists, and is not simulated.

In reality, there exists a certain sensibility, distinct from the sense of touch, and which I am tempted to believe is due to muscular sensibility. It is what Duchenne, of Bologne, long since styled motor aptitude, independent of sight; it is the same phenomenon which I have observed limited to the interosseous muscles of the hand in hystero-epilepsy. I do not suppose that these effects are due to any special aptitude, or to any special sensibility limited to the muscles; but I think that when cutaneous sensibility has disappeared from the hand, there may persist a certain amount of sensibility, sufficient to enable the patient to feel any object placed in the hand, and to execute the movements necessary for seizing it.

Such were the symptoms observed in this case; it was necessary to arrive at a correct interpretation of them in order to determine the nature of the malady. The first point completely established by these considerations is that the patient is hysteric. The hemianæsthesia exactly limited to one-half of the body, affecting tactile sensibility and the special senses, and without being accompanied by muscular trouble or intellectual derangement, can be due only to hysteria. This opinion is corroborated by the existence of gastralgia, rachialgia and pleurodynia on the left side. The existence of hysteria is then incontestable; this patient was under the influence of hysteric troubles, partly brought on by family cares and troubles, and aggravated by prolonged fatigue.

But because this woman is manifestly hysteric, it should not be concluded that all the pathologic symptoms she presents are due to hysteria; this would be a serious error. Just as a patient suffering from chronic symptoms due to lead or alcohol, may present lesions entirely independent of the toxic effects due to these two substances, so the general state of hysteria in this case does not necessarily prove that the symptoms from which she had suffered were of hysteric origin. The etiology of these symptoms is against such a supposition, for they appeared under the influence of a well-determined cause: the chill, determined by the wetting she received when thoroughly heated and sweating after vigorous and prolonged labor.

This cause is evidently the point of departure of the entire pathologic processes which followed. Such causation does not evidently belong to hysteria, but is the most frequent origin of rheumatism.

We should, then, on the one hand, accept the hypothesis of hysteria; on the other, that of rheumatism. But what part was due to hysteria? What proportion to rheumatism? Both affections present analogies at various points of view, as regards symptoms, etiology, and even as regards the organs affected. In effect, hysteria, like rheumatism, attacks all organs, skin, muscles, articulations, viscera. In hysteria, hyperæsthesia and anæsthesia of the skin are common phenomena, but the rheumatic subject presents epicrania, which is but one form of excessive hyperæsthesia. Sometimes even anæsthesia has been observed, but such cases are rare. Rheumatismal anæsthesia is generally observed in connection with rheumatismal contracture. The muscles are often the seat of pain in hysteria; muscular rheumatism is well known, and it is sufficient to mention it. Muscular paralysis, localized and often generalized, is common in hysteric subjects. In rheumatism paralysis of a group of muscles, innervated by one nerve (radial and facial paralysis), is sufficiently frequent. These forms of paralysis are of much greater extent in hysteria, and the hemiplegic character they assume is wanting in rheumatism. Contracture, primary or consecutive to arthralgia, is well known in hysteria; it sometimes exists, but in a less intense degree, in rheumatism. Convulsions seem to be observed particularly in hysteria; very rarely in rheumatism. Chorea, however, is of a rheumatic nature. Lesions of nerves exist in both maladies; neuralgia is common in both; but in rheumatism the neuralgia is better limited to the muscular branches. In hysteria localiza-

tion is more difficult. In the first case, in rheumatism, neuralgia attacks an anatomical group, while in the second, hysteria, it affects rather a functional group.

The articular lesions are specially remarkable in rheumatism, but they may exist in hysteria, in which malady articular pain, with congestion and even exudation into the joint, have been observed; but what characterizes these symptoms, which have frequently been taken for those of white swelling, is their sudden disappearance, as if by enchantment, after long resisting all methods of treatment.

Sensory troubles appear also to predominate in hysteria, but they sometimes exist in rheumatism. It is well known that certain forms of amaurosis are due to rheumatism, as also diminution of hearing in certain cases, attributed to rheumatism of the small articulations of the ossicula auditus. As regards taste and smell, I know of no derangement due to rheumatism, while such are very frequent in hysteria, and always accompanied by cutaneous anæsthesia, which facilitates the diagnosis.

The visceral troubles in hysteria are numerous and may simulate any disease (Sydenham), cough, asthma, angina, etc., hemorrhages from mucous and cutaneous surfaces. Rheumatism is accompanied by gastralgia, enteralgia, renal pains, differing from those induced in a gouty subject by the presence of calculi or uratic deposits, and absolutely independent of the presence of calculi in the kidney.

Hemorrhages even are not unknown in rheumatism; besides cutaneous hemorrhage, rheumatismal purpura, and hemorrhage into the interior of articulations (facts observed by Constantin Paul), hemorrhaphilia should not be forgotten. Patients subject to excessive loss of blood after slight injury are frequently met with among rheumatic, very nervous, and hysteric patients; and they generally descend from families subject to hysteria or rheumatism.

As may be seen from the preceding enumeration of symptoms, the entire organism may be affected in hysteria or rheumatism. I have not spoken of the change in the character of the individual. The two types have, at this point of view, characteristics special to each. There is a peculiar sensitiveness to impressions; the mental state in hysteria is well known, but on the disappearance of certain rheumatic pains the patient becomes a prey to anguish and a peculiar state of anxiety, until the pain returns; certain gouty patients are calm only when suffering from great pain in the toe; if the foot is cured, the patient becomes immediately exacting and disagreeable. How can the physician decide which of the two diseases he is in presence of? Hysteria is characterized by hyperæsthesia, hemianæsthesia, localized painful points, the hysteric ball in the throat, the averred existence of anterior convulsive attacks. Again, hysteric symptoms have this special character: after lasting months, or even entire years, they suddenly cease, brusquely and almost without pretext, and the general health becomes completely normal.

Paraplegia, or muscular paralysis of several years' duration, is not followed by atrophy of the muscles, as happens for affections of the same nature but having a different cause; in hysteria the muscle in the end is as contractile as if it had not been paralyzed, and is all ready to enter on action.

In rheumatism some characteristic circumstance is ordinarily found, such as the impression of cold and damp, pain as soon as the patient is at all exposed to slightly lowered temperature, then a prompt exacerbation of muscular or nervous pain. Hereditary predisposition is also of value in this research.

Finally, the symptoms of rheumatism are not so marked as those of hysteria, but diagnosis may be arrived at by exclusion. It should not be forgotten, however, that in rheumatism the general character of the symptoms is rather anatomical, while in hysteria they take on a functional character. The often excessive mobility of the phenomena characterize hysteria rather than rheumatism, in which the lesions are more durable. The seat of the lesions in hysteria, on the left side, has also a certain value.

Finally the causation should be taken into consideration; hysteria appears under the influence of sometimes a very slight mental emotion; rheumatism after the patient has been exposed to cold. Nevertheless this system of etiology should not be too much depended on; the action of cold may determine a hysteric attack, while nervous troubles may be the signal of a rheumatic attack. These two morbid states have a common field of action—the nervous system; they may be associated; one may derive from the other. One woman, daughter of a gouty patient, will be hysterical during her youthful years, becoming rheumatic in old age. It is remarkable that this form of hysteria is localized rather in the viscera than in the other organs; its character is more obscure than usual.

Briquet mentions a case where a young girl became hysteric under the influence of cold. He

has published cases of hysteric coxalgia and paralysis brought on by cold and dampness, and attacks of asthma due to the same cause.

Again, there is a certain form of angina pectoris which is peculiar and independent of the grave form, appearing only in nervous women, in hysteric patients, and sometimes in rheumatic subjects. These examples prove that hysteria and rheumatism may be associated, cold being the excitant of the nervous system, which will induce hysteria, just as a traumatism may have the same rôle in inducing rheumatism.

What conclusions may we draw from all these considerations, regarding the patient who has been the object of this discussion? The study of these facts demonstrates that this woman was simultaneously affected with hysteria and rheumatism. She was very sensitive to the impression of cold, particularly on the left side, because in the low, damp room she occupied, as janitress, she had the left side turned toward a large open window, near which she remained almost all day, seated. This side of the face was so sensitive to the impression of cold that when she left the house she was obliged to cover it with the arm or hand. But when, besides that, she was inclined to hysteria, the system was completely prepared; she became thoroughly chilled and wetted by the cold rain when heated with hard work, and this last, which constituted the cause of the rheumatic attack, also became the point of departure of hysteric symptoms. The violent pain on the left side of the head may be attributed to both causes united; epicranial rheumatism augmented in intensity because of the hysteria. This is, in effect, one characteristic of hysteria; it gives excessive intensity to all morbid manifestations. In this case, then, we yesterday instituted a treatment proper for rheumatism, and administered salicylate of sodium.

To-day we observe an absolutely unhoped for amelioration in all the symptoms, which have all diminished in intensity; the sight of the patient is clearer; she hears the tick of a watch; she hardly suffers at all. She says that during the night she had an expectoration of blood and purulent matter, which seemed to ease her considerably. We can form no opinion concerning the origin of this matter expectorated; there might have been a pus cavity at some point in the pharynx, or in the Eustachian tube; the secretions might have become accumulated, which would explain the pains in the ear and the deafness. But this is but a subject of hypothesis.

But, besides this unknown cause of amelioration, should we attribute to the salicylate of soda any part in the prompt and decisive amelioration we observe this morning? Certainly not. This medicament is neither so active nor so powerful; nevertheless, we may affirm that the amelioration obtained demonstrates the rheumatic origin of the affection, at the same time that the rapid disappearance of the painful symptoms recalls precisely the character of mobility which hysteria imprints on these rheumatic manifestations.

Communications.

WATER DRESSINGS AND BATHS IN SURGERY.

BY GEO. HALSTED BOYLAND, A.M., M.D.,
Of Baltimore, Md.

The absence of extended discussions on the employment of water, either hot, cold or tepid, in the treatment of wounds, as a dressing, and topical bath for parts affected, is a conspicuous feature of the many surgical annals and clinical reports consulted by the writer. A reference to the standard works on surgery will prove hardly more instructive: in many, the subject, as such, is not even mentioned, while in a few, if found in the index at all, it is summarily dealt with in five or ten lines, and finally dismissed altogether. Is it that our authors, ever striving after what is beyond in science, have, to say the least, not given proper importance to one of the most efficacious means of treating surgical diseases: a means at once so simple and universal as to be likely to be passed over with indifference, when simplicity and universality ought to be its chiefest recommendations; as no one will probably gainsay that simple surgery is best?

It does seem that the subject of water dressings merits a much more prominent place than has hitherto been given to it in our surgical literature; and this is one reason that has induced me to compile the following notes. Another reason is the hope that the general practitioner may find something useful in the record of cases given below. These cases have been selected from a great variety of surgical diseases, occurring in my own practice, in which the treatment in question proved more rapidly successful than either lead water, diluted alcohol, or antiseptic dressings could possibly have done, and in some of which these had been previously tried.

The chemical action of hydrogen and oxygen gases upon tissues, in oftentimes preventing suppuration, is of itself a sufficient answer to those who object that water is empirical, to say nothing of the molecular changes, causing a quick

reduction of swelling, when applied cold to bruises. But let us hasten on to practical application, leaving to the scientist the study of the gases from his standpoint, and to the hydropath the exhibition of his panacea in the ills that flesh is heir to.

Ancient writers, Hippocrates and Celsus among others, seem to have set the example of giving water a very inferior place, both in their writings and practice. If more modern practitioners had given dressings and baths of this kind a fair trial, this example would not only not have been followed, but pure water would have been the most used liquid in surgery. Baths, sprinkling or pouring water over a wounded surface, either warm or cold, as the case may demand, find the most extended field in surgical treatment. Personal observation has been convincing, that in very many cases expensive and complicated bandages, with salves and plasters and fomentations, can be, with infinite advantage to the patient, exchanged for water compresses. Water works partly as a liquid, that is, loosening, dissolving and cleansing; partly by its temperature and partly by keeping off the air. For the application of cold, compresses wet with very cold water and often changed are best adapted; but before being laid on they should be carefully wrung out; in some cases, the continued pouring of cold water over the affected part is more efficacious, or, finally, ice broken as finely as possible, and confined in bladders, gum sacks, glass bottles, or tin boxes, may be used whenever it is desired to have the working of the cold decidedly and continuously. Under such conditions, ice has no equal, and can only be imperfectly replaced by the ether spray or by the so-called cold combination. This is a mixture well known to German surgeons, and consists of equal parts sal ammonia and saltpetre, prepared in solution with water immediately before using; or sal ammonia, 1 part; saltpetre, 3 parts; vinegar, 6 parts; water, 12 to 24 parts. Owing to the tendency of the liquid to escape through the meshes, charpie is less suitable for water dressings than compresses, which retain the water better, on account of their texture being closely woven.

In using water on chronic ulcerating surfaces when moist, warmth is indicated; the addition of linseed, powdered, or of grist, or meal, has usually been considered necessary; not so much on account of any curative effects these cereals may possess, as by reason of their capacity to retain warmth. In view of this, the practice of placing this paste directly upon the wound, as recommended by no less an authority than Bardeleben* in his admirable work, is to be condemned as useless and unclean. A gum bag, filled with warm water, may be substituted with advantage and convenience, and will be found to retain the warmth equally as long. The temperature of a warm application must be from 100° to 130°, Fahrenheit. Of course, the principal point is to let the moist warmth exercise all its power upon the tissues; and just as in the application of moist cold, which is laid on at as low a temperature as possible, and must be renewed as soon as the bodily warmth is communicated to it, so moist warmth must be renewed as often as it shows signs of cooling. In using the gum bag it will, as a general rule, be found necessary to refill it at least four or five times a day. It is a good plan to cover the bag compactly with stuffs that are bad conductors of heat and not easily permeable, and in this manner prevent a too rapid cooling. With the gum bag the drying, which in the cataplasm has to be guarded against, naturally falls out of consideration, and sufficient moisture is obtained by the bag having been first dipped in water at the same temperature as that inside, and laid wet upon the surface. This should always be done; then the cloths enveloping it will serve well to keep up moisture enough. The practitioner will doubtless observe that there is a certain inclination of the bag to slip, both on account of its weight and the fluidity of its contents; but this is easily overcome by careful bandaging and fastening in the first place. It is best to have the bag made of the thinnest and most flexible elastic material compatible with the demands of the use to which it is to be put. Another gain in employing the gum bag is the facility with which it is removed. In removing a cataplasm, such as referred to above, care is necessary, especially when the mass is laid directly on the skin, or when separate portions of it are dried thereon. In the last case they must be carefully moistened, and either washed off or scraped away with a spatula. Considerable time may be lost in this way, much inconvenience caused to the surgeon, and not unfrequently, pain to the patient. Sometimes the mildest cataplasms—of water and linseed, for example—cause considerable irritation, so that vesicles spring up, and the wound surface swells, assuming a gray tint. This is usually attended with a sense of pricking and slight discomfort to the patient; but in spite of the gray swelling cicatrization follows normally, and the vesicles soon disappear again, provided the temperature of the

* Bardeleben Chirurgie. Vol. I. p. 113.

cataplasm is not too high, or the seed and water mass does not become sour. Equally good and rapid results are obtained by the bag, and all this is avoided. If a bag is not at hand, I prefer a linen compress, wet with water at the requisite degree of heat, wrung out, and then applied directly to the wound surface, without any admixture of linseed, grist or meal.

With reference to the employment of cold water dressings, in fresh injuries, their action is refrigerant, styptic, discutient, decongestive and more prompt in chronic cases, where their influence asserts itself more slowly, but none the less surely, and progressively causing a change of tissue, and having a decided tonic and slightly stimulating effect, calling back a torpid ulcer to life and healthy granular activity, more noticeable, certainly, in cases in which there is no dyscrasia; and in these no dressing would avail until the general condition had been improved by such treatment as the taint in question might require.

In the cases that will now be given no two are alike, each having been selected because it is typical of a particular class, as the limits of one article forbid the introduction of long lists of cases, especially, as they would bear sufficient clinical resemblance to make them monotonous, and the slight differences existing between them would present nothing of marked surgical value.

Case 1.—G. R. F., aged thirty-five, unmarried, of combined nervo phlegmatic temperament, a large, well-developed man; height, six feet one inch in stockings; without history of disease in his family; had had smallpox earlier in life, and once pneumonia. At the time of infliction of the injury to all intents and purposes a sound man, without constitutional taint. On May 31st, 1876, G. R. F., a painter by trade, was standing by the roadside in front of his shop, near Baltimore, conversing with two men in a buggy, his right foot being unconsciously between the fore and hind wheels. A bicycle passing at that moment from behind made the horse start suddenly forward, causing the hind wheel to pass directly over his foot, just on the lower border of the instep. Owing to the weight of the wagon with its occupants, and the sharp edges of a new steel tire, the skin was cut, although protected by a heavy boot, some blood lost, and an ugly, irregular wound created, laying bare portions of the first and second metatarsal bones, otherwise uninjured, and bruising and mashing the soft parts between them to the depth of about half an inch or more. He did not consult any physician or surgeon, but knowing something of carbolic acid, and being able to limp to a horse-car, was conveyed home, where he procured some carbolized soap, and proceeded to dress his wound every morning with this and water.

At the end of two weeks, not noticing any improvement, he consulted an apothecary, who told him to try tar salve. This, he afterwards informed me, seemed to make it worse, until June 23d, when he was first seen by me. The wound on the foot was at that date of a dark brown color at bottom, surrounded on the border by a reddish areola; there was no secretion of any kind, the general appearance of the injury being dry and torpid. The larger saphenous vein was red and turgid, from the foot to the groin, showing signs of phlebitis. The inguinal glands on both sides were indurated and engorged, though indolent. Besides which the patient complained of general malaise and torpidity of the bowels, owing, doubtless, to repeated doses of laudanum taken to alleviate the pain, of which he was still complaining.

I ordered him to stop the medicine and the salve, and after prescribing a good dose of salts, and cautioning him about keeping his bowels open daily, further advised him, as he insisted upon limping about, to go to the back room three times a day, prop his foot under the spigot, and let the cold water run upon the wound for half an hour without interruption, and in the mean time to recline upon his lounge or bed with his foot raised to the horizontal position and wrapped in cold water compresses, a moderate diet only being recommended. On the following day, June 24th, the swelling of the left inguinal glands had entirely disappeared, that of the right diminishing perceptibly; the saphenous vein had lost its redness and could not be traced by sight or touch otherwise than is normal; the dark brown color at the bottom of the wound had given place to a redder and more natural hue, while the red areola had assumed a pink tint scarcely noticeable. The next day but one I called to see this patient again, but he had gone out; it was, consequently, not until ten days later that we met by chance, when, upon asking him about his wound, he informed me that suppuration had appeared and increased during the first few days after my visit, but had then decreased, the wound healing rapidly by granulation, with absence of pain; the swelling of the glands having disappeared on the third day after the cold water treatment was begun, and having experienced no further inconvenience from it, he had been pursuing his avocation for some days past.

This case shows the value of the cold water treatment in chronic cases, even when the disease has been standing so long that constitutional symptoms begin to manifest themselves. It is true that there were some favorable points in this instance; for example, the patient's good general health; then, again, the bones were uninjured and the periosteum intact. Nevertheless, the symptoms and combined appearance of the case were such as to cause fear of almost immediate erysipelas, followed probably by septicæmia, the swelling of the glands being already undoubtedly of septic origin. The tonic and stimulant action of the cold water dressings were markedly manifested on this chronic wound, restoring the patient to perfect health, and thus avoiding what there was every reason to believe would have been a fatal issue. This case has been given somewhat in detail, as a rather important one and one representative of a whole class.

Case 2.—The first time the writer ever had occasion to test the efficacy of cold water applications to fresh and acute inflammations of the knee joint, was while passing the summer, a few years ago, in Switzerland. Col. ——, of the French army, and myself, were descending a mountainous road, returning to Chamouni, having almost reached the bottom, when his heel slipped on a smooth, round stone, causing him to fall heavily, in doing which he gave his left knee a violent twist and snap; going to him, with the guide, we raised him, but found him unable to walk and complaining of intense pain. Leaving him by the side of the road we hurried on to Chamouni for a char-wagon, and soon transported him to his hotel. Upon examination I found the knee much swollen, the skin tightly drawn over it, exceedingly painful to the touch. The patient, of sanguineous nature and very nervous, also suffered from nausea, induced, no doubt, by reflex irritation of the sympathetic ganglia. Placing him on the edge of the bed, undressed, with his foot upon a chair and a large deep tub under the knee, I poured bucket after bucket of cold mountain brook water over the inflamed knee, holding them up some distance, so that the water might fall upon the knee and thoroughly douche it. After continuing this for some time, say one-half to three-quarters of an hour, the knee (to some extent below and above it also) was wrapped in large, wet towels, around which were placed others, dry. The whole process occupied about an hour, after which I left my patient with his limb extended in bed, and with the assurance that he experienced no pain, feeling, on the whole, as he expressed it, "assez bien."

It was now nine o'clock in the evening. The next morning, at daylight, he informed me that he had slept quite well at intervals during the night; pain and nausea had not returned. Upon removing the dressings, I found the knee less tense than before; there was still swelling and redness; both, however, had somewhat diminished. He could bend his knee just perceptibly, only. The cold douche and wrappings were then repeated; again at mid-day and again at night. The next morning the redness had entirely disappeared, and there was very little swelling left; the douche and wrappings were used only twice that day. On the following morning found him up and sitting by the window. Cautioning him about his imprudence, he replied that he felt only a little stiffness in the affected joint. Ordered one douche at mid-day, cold dressings to be continued until stiffness should be entirely gone; this was in a very few days, after which patient suffered no inconvenience whatever. It has always been a source of regret that the daily progress could not have been noted in Case 1, but the rapid results spoke for themselves. In Case 2, the gradual decrease of swelling and redness, and return of movability in the joint, were watched with almost hourly interest, attesting the therapeutic value of cold water dressings, as decongestive, antiphlogistic, and discutient; their anodyne property having been shown by the immediate cessation of pain before the swelling and tension began to subside.

Case 3.—Mrs. L. S., age 35, mother of two healthy children, herself affected by chronic endometritis and slight valvular trouble, while attempting to raise a window that had no weights, was struck just above the wrist by the heavy sash falling full distance upon it. I happened to be in the house at the moment of the accident, and saw the arm at once. The skin was not broken, but extending from the immediate neighborhood of the wrist, up the forearm, was a large bruise the size of a man's fist, dark colored and congested, hard to the touch. The patient, although not a nervous lady, was trembling from the shock. I had a foot tub half filled with the coldest water that could be got, and made her keep the forearm submerged in it for half an hour, after which the cold water compress and dry compress over it were applied, to be changed as often as she felt that it was drying; the arm to be carried in a sling. Called to see her on the morning of the second day after, and found the swelling almost gone; the ecchymosis still remaining. The dressings were persevered in for a few days longer, when the

arm was completely cured. The detergent and discutient action of the cold water topical bath, followed by the dressings, were very decided.

Case 4.—A young girl, aged 17, had been suffering for some time from a deep cut across the wrist, done by falling on a piece of glass. When brought to me, there was considerable swelling above and below the wound, with some redness, the appearance of which resembled that of inflammation of the sheaths of the tendons, although much less developed. The wound itself, as usual in these cases, had been treated, or rather maltreated, on the open plan, with quack salves and applications of different descriptions. These were ordered discontinued. No topical bath was given in this instance, the wound showing signs of granulation at bottom. Cold water dressings were given in the way above indicated; she called 48 hours later, and the granulations were in active progress through the entire extent of the wound, the swelling above and below having almost entirely subsided. The wound progressed favorably under the treatment, and cicatrization soon followed, the arm being carried in a sling until this was accomplished.

The signs of granulation existing when the wound was first shown me were such as would have invited a gentle cauterization with a very mild solution of nitrate of silver, in order to call the beginning granulations into healthy activity, a result readily effected by the cold water dressings. The sling had no effect on the treatment otherwise than to rest the arm and aid thus the venous circulation in accomplishing a reduction of the swelling. The therapeutic relation of very cold water to a mild caustic is evident.

Case 5.—A lady, Mrs. I. L., of plethoric habit, aged 45, had fallen from a carriage. As she was on the step, getting out, the horses started suddenly, throwing her violently, with a dragging motion, on her face, scraping it upon the road-side path, composed of gravel and sharp fragments of shell. I saw her almost immediately; the wounds, five in number, were quite deep, denuding the bone in the region of the right zygoma. Although not of nervous temperament, she was trembling from shock, rather incoherent in her answers about the accident, and much frightened at the quantity of blood she was losing, which was indeed considerable. Reassuring her on this point by telling her that it would be all the better with her for that, I had her placed on a lounge and given some aromatic spirits of ammonia and Vichy water. Her face was then sponged off with cold water, and dressed with the same material, the vessels commencing to contract and reduce the bleeding to a slight oozing. The mode of dressing here was to cut off a piece of fine linen the size of the face, with holes for the mouth, nose and eyes, and to lay this, thoroughly wet with ice-cold water, upon the whole face and forehead, which was also lacerated. This was about ten o'clock in the morning of August 16th. The next day, at the same hour, found all the abrasions and wounds covered with a thick incrustation of lymph; and patient informed me that she had passed a comfortable twenty-four hours, there having been no return of the bleeding, but only an oozing of lymph during the preceding day. This had ceased during the night. Early in the morning the bowels had moved spontaneously, and all appearance of congestion about the face had vanished. I saw this patient once more, on the following morning, when the crusts had begun to shrink, and signs of cicatrization could be distinctly seen putting out around the edges of all the injured places.

The action of the cold water dressings in this instance was both styptic and colloid. A few days sufficed to complete the cure, although the lady preferred to keep her room until the incrustations fell off spontaneously, and thus ceased to mar her beauty.

Case 6.—Wm. A., male, aged 50; married; a laborer by occupation; of phlegmatic temperament. Was wounded in an affray, by a large knife passing across the lower third of the upper arm, on the flexor side, and severing a portion of the biceps muscle in its anterior fibres. Instead of putting in stitches, determined, if possible, to get a healing by first intention and without the use of adhesive plaster. I flexed the arm, and thus brought the edges of the wound in close apposition; as the bleeding had ceased, I applied the cold water compress, with dry one over it, and bound the flexed arm fast to the breast, as is done in cases of fractured clavicle. These bandages were not removed until three days had elapsed, but the wound was thoroughly wet from the outside with cold water, as often as the bandages began to dry. When they were removed, at the expiration of this period, there was a complete union by first intention, a little stiffness of the arm, being the natural result of keeping it in one position so long. The dressings were changed and continued a day or two longer, the patient being now allowed the restricted use of his arm, the stiffness in which speedily disappeared.

This case was more or less of an experiment. The offer was very tempting. It is, in fact, very

rare to find one so adapted to our purposes. It is certainly admitted that the flexion, by bringing the edges of the wound together and keeping them so, accomplished really all that was necessary in healing per primam. The cold dressings must have, nevertheless, the due credit for their antiphlogistic and pain-alleviating properties. There was no inflammation and no sense of burning in this wound, from the moment the dressings were applied.

In closing these notes, the writer would repeat that all of the foregoing cases, with the exception of the last one, which is unique, are typical ones, carefully selected from numbers very much like them; so that the objection usually offered, that the data are not sufficient, will hardly avail. The surgical critic will interpose, "water does everything, then." In reply, I would state that I believe it does—in general. The temperature of the water must be varied according to the demand of the case; for instance, in torpid ulcers, where moist warmth is indicated, the proper caloric is given in degrees Fahr. above. In order to obtain the full working of *lukewarm* water there is no better means than oft-repeated and continued baths, either of the whole body or of the part affected. The part affected may thus be kept in a permanent bath for days together. If, on the other hand, a *fresh wound be placed in a warm bath* there is soon noticeable a considerable swelling of its surface, its borders, and even its surroundings, in consequence of the imbibition of water; this may be of advantage as to making exudations soluble and more capable of resorption. The red wound surface, moreover, soon assumes a grayish tint and appears as though covered with a pseudo membrane. This depends partly upon the layer of exudation really covering the wound surface, and partly upon its welling up. This layer of exudation is loosened in from three to four days, by the granulations springing up under it. These grow up rapidly from all sides, although much of their bright red color is lost by soaking in warm water. If a wounded limb that has already been kept some time in a permanent bath be suddenly withdrawn, the wound surface will appear much smaller a few hours after drying. This process is exactly the reverse of what takes place if *a fresh wound be treated by cold water;* and the results are less prompt. In practice, generally, no matter how the wounds are dressed, I have found irrigation with water at each dressing cleanly and invigorating. If permanent irrigation with either warm or cold water is desired, an ordinary washtub with two or three holes bored, in a straight line, in the bottom, into which fit tin pipes of small calibre, in the long diameter of the limb, and provided with stop-cocks, will be found serviceable; a second tub being placed under the limb, to catch the overflow.

The benefits to be derived from the permanent warm bath may be briefly summarized thus: removal or alleviation of pain that is chiefly dependent upon contact with the outer air; doing away with changing bandages, with its attendant pain and inconvenience, as the bath itself acts as an occlusive bandage, and any sutures that may have been laid on can be removed under water; reduction of the wound fever; the greatest cleanliness, attained by constant washing away of the wound secretions; in a word, more rapid induction of the healing process.

All water used for surgical purposes must be carefully inspected as regards foreign substances and decomposing matter. Spring water is best. If only river, or cistern, or pump water is available this should, if it is possible, be filtered before being employed. In every doubtful case disinfection of the water with a small proportion of the chloride of zinc is safest, otherwise the water dressings would carry infection to the wound surface, and be productive of consequences so serious as to impede the *vis medicatrix naturæ*, which the treatment of wounds with dressings and topical baths of pure water, hot, lukewarm, or cold, as the case may demand, gives full play to.

Medical Societies.

BRITISH MEDICAL ASSOCIATION.

(*Concluded from page* 434).

Section on Obstetrics.

Dr. E. Trestrail presented a paper on

POST-PARTUM UTERINE EXAMINATIONS.

He maintained that in puerperal fever, sickness following delivery, hemorrhage, protracted after-pains, etc., the early examination of the interior of the uterus enabled the real cause of the illness to be arrived at and removed, and serious results prevented. He stated his opinion that puerperal fever arose more frequently than was commonly supposed from the retention of decomposing pieces of placenta, etc., and that their presence in the uterus caused it to contract more forcibly near the os than at the body and fundus, thus causing the retention, rather than the throwing off, of the decomposing and blood-poisoning substances. He also referred to the like action of ergot, as proved by a series of three hundred experiments in *post-partum* cases, so that it could not be relied upon to empty the uterus. He also pointed out that no medicinal treatment, nor syringing the uterus with disinfectants, would cause

the removal of some clots, which, from their gradual formation and solidity, had become most firmly attached to the walls of the uterus, and could only be removed by the hand; and that thus many cases of *post-partum* illness and incipient puerperal fever could be cut short by the internal examination of the uterus, and by no other means.

ON UTERINE DISPLACEMENTS.

Dr. Bantock (London) believed that much of the discrepancy in treatment of these displacements arose from the want of precision in diagnosis, and the habit (in the case of backward displacements) of not distinguishing between an essential version and flexion. It was impossible to reconcile the differences which existed in the matter of statistics, except on the grounds stated. In his practice he found the order of frequency to be this: retroversion, anteflexion, anteversion, retroflexion. It might sometimes be difficult to say whether a particular case of backward displacement was essentially a version or a flexion, because a version might have flexion superadded, owing to the various degrees of resistance offered to the descent of the body into Douglas' pouch and the ascent of the cervix in the vagina, but it was not impossible. Versions were to be treated by the vaginal pessary alone, and flexions by a combined vaginal and intra-uterine pessary, such as Meadows'. One reason why failure was often met with was, that no care was taken to adapt the size and shape of the pessary to the requirements of the case. In anteflexion, inflammatory conditions must be treated first; in many cases the sound alone sufficed. When there was constriction of the internal os, division must be practiced; and in many cases the stem pessary was a *sine qua non* of treatment. He regarded anteversion as the least in degree and in effects, and as least of all requiring treatment. No vaginal pessary had yet been invented, nor was likely to be, which would correct a flexion.

SHORT AND PRACTICAL HINTS ON NATURAL LABOR.

By H. H. Muggeridge, LL.D., M.R.C.S. (Seaford). The following is a list of the points touched on in this paper, which the author thought useful for young obstetricians: Primiparæ, after thirty-five or forty years of age: patience to be observed before the use of forceps; also consultation with an experienced practitioner, if it can be obtained; fears of patients at those ages in first confinement; advice and hints to prevent a hard and lingering labor. Placenta, its expulsion and removal in hour-glass contraction and adhesion. Hemorrhage from funis of infant after separation by ligature. Retention of portions of placenta. Hemorrhage and its consequences. Catheter, its use during and after labor and instrumental delivery; necessity of perfect knowledge how to introduce it; case in point. Directions to nurse. Women not pregnant, who think themselves so; necessity of correct diagnosis. Ovarian tumors. Large hypertrophy of nymphæ and clitoris in primiparous patient thirty five years of age, pregnant; operation at seven months; delivery at full period with forceps; living child; recovery of patient. Force of imagination and mental disquietude during pregnancy, illustrated by birth of two-headed female at full period, still-born. Dr. Thompson (Bideford) bore testimony to the correctness of the first principles called to mind by the paper; but he objected to pinning the binder; he always had a long one, and tied it in a knot behind the patient. He urged the importance of noting the frequency of the pulse as an indication of impending hemorrhage. In order not to interfere with this, he avoided giving stimulants. Then, as soon as possible, he put the child into its mother's arms; it was not essential that it should take the nipple. He had never known a case of hemorrhage where this had been done. In cases where it was difficult to extract the placenta on account of its size, he pressed well on the uterus; then snipped the ligature on the cord, and allowed some blood to escape. This reduced the size of the placenta, and allowed its easy extraction.

SECONDARY POST-PARTUM HEMORRHAGE.

J. Braxton Hicks, M.D., F.R.S., London, read cases, with remarks, where the whole or part of the placenta had been retained, for some reason or another. The cases were mostly at full term or advanced pregnancy; in many of them imperfect attempts at removal had been made, though subsequently in all it had been accomplished, but with great difficulty. In most of them secondary hemorrhage had occurred: in all but one there were offensive discharges. Dr. Hicks had brought forward these cases partly to show the value of the standard rule, which insists that in every case where possible portions of placenta remaining on the uterine wall should be removed; and the cases he narrated illustrated the nearness of death or of great danger when, for some reason or another, the rule could not be or had not been followed. Dr. Hicks advised that, in all cases after delivery, where, with floodings, there was offensive discharge, the uterus should be explored.

Dr. Cordes, Geneva, related a case of secondary hemorrhage which occurred in a patient aged 45, who, 107 days before the hemorrhage, had what the midwife said was a complete abortion at three months. There was no putrid smell with the bleeding. Ergot, cold, and turpentine, were of no service. The third day he gave two grams (thirty grains) of quinine. Expulsive pain came on, extruding a piece of placenta as large as the ends of two fingers, quite inoffensive. Thus, after 109 days, this piece of placenta was still what might be called living. Dr. Henry Bennet, Mentone, believed that retained placenta, when adherent, was generally due to preceding inflammatory states. When there was much hemorrhage after abortion, he recommended plugging the cervix, "driving the plug like a cork into a bottle." Dr. R. Beverley Cole, San Francisco, said that he invariably, directly after he had handed the child to the nurse, inserted his hand into the uterus and brought away the placenta. It cut short the woman's sufferings, and did away with the risk of *post-partum* hemorrhage. The pressure of the hand in the uterus, moreover, excited contraction. This plan had the advantage of revealing any adhesion at once. Dr. Williamson, Ventnor, compared this practice with the reluctance generally felt

about introducing the hand into the uterus except under circumstances of necessity, and he asked for the result of Dr. Cole's cases. Dr. Cole had followed the practice he described for thirty years, and had only had one death from hemorrhage. Dr. Edis, London, protested against Dr. Cole's opinion on this matter going forward as the opinion of the meeting. Dr. Braxton Hicks, in reply, said that adhesions of the placenta did not occur so often as to warrant Dr. Cole's treatment being pursued in every case, lest the placenta was adherent. Nature was able to do her own work.

ON STERILITY.

By Arthur W. Edis. M.D., F.R.C.P. (London). The fact of many women conceiving within the first year of married life, and then, after an early miscarriage or labor at full term, never again becoming pregnant, was commented on, and an explanation offered. The importance of ascertaining, after a confinement, that the patient had not incurred more than ordinary penalties of parturition, and that she was left in a fair way to recover her former physiological condition, was insisted on. Even after many years of acquired sterility, a fair proportion of the cases usually met with could be successfully treated, if only pains were taken to ascertain the exact nature and full extent of the injury sustained, and to persevere sufficiently long with treatment.

Dr. R. Beverly Cole (San Francisco) considered that subinvolution was perhaps the most common cause of women being sterile after having one child or one abortion. The causes of subinvolution were numerous—too early getting up, bad digestion, strumous diathesis; the first was a very common cause of subinvolution in America. He had found superinvolution or atrophy of the uterus more difficult to deal with. He mentioned his usual mode of treating these cases, describing his galvanic pessaries, which consisted of a stem composed of parallel bars of zinc and copper insulated by a thin layer of vulcanite. In thirty cases, he had thus built up the uterus from one inch and a quarter to the normal size, within three months.

Mr. Ross Jordan (Birmingham) had had several cases like Dr. Cole's, which he had treated similarly.

Dr. Henry Bennet (Mentone) agreed with Dr. Edis. He mentioned that, at a late census, one million of married people were sterile. The same thing obtained in cattle. One woman in six was sterile. It seemed as if a certain portion of the female creation were destined to be unfertile. He believed that frequent sexual intercourse, setting up inflammatory conditions, was unquestionably a cause. He thought prostitutes were generally sterile, because they were recruited from the sterile classes.

Dr. Cole thought sterility should not all be laid to the charge of the wife, fifteen per cent. of cases being due to the man.

THE PROGNOSIS OF SYPHILIS IN WOMEN AND CHILDREN.

C. R. Drysdale, M.D., London, said that women were, generally speaking, much more affected by syphilis than men. The virus might awaken any tendency to consumption or scrofula in women; and one form of skin disease, the pigmentary syphilide, was peculiar to women, or at least extremely rare in men. It was seen mostly in the neck, but Dr. Drysdale had seen it on various parts of the skin. Women, too, frequently lost almost every hair on the body in secondary syphilis, which was rare in men. Periostitis was far more common in women than in men, and so were headache in the secondary period, hydrarthrosis and trembling, with emaciation and prostration. Anæsthesia of various points of the surface of the skin was frequent in women; it was most seen on the backs of the hands, on the mammary gland and the cheeks. Extreme coldness of the surface also occurred in women. The author had seen jaundice several times in women in the secondary period. The generative system was greatly affected in the syphilis of women. During the secondary stage of their disease they often suffered from leucorrhœal discharges, which were for the most part non contagious, unless accompanied by some syphilide of the vulva or vagina. In some cases, doubtless, this gonorrhœa was contagious when inoculated on a healthy subject. In a few cases, syphilis caused in the secondary period complete suppression of menstruation, especially when malignant syphilis was present. Secondary syphilis rarely caused sterility, but pregnancy rarely ran its full course, and the patient had an abortion or premature labor if in the secondary period of the disease. Of ninety-seven pregnant women with secondary syphilides, at least thirty aborted. Syphilis was one of the commonest causes of the death of the fœtus. In rare cases, no healthy child was ever born. As a general rule, however, women, even when untreated, tended to have healthy children in three or four years; but he would not recommend any one to marry a syphilitic woman. Men constantly married a few years after the chancre, and had perfectly healthy offspring. The prognosis of syphilis in infants was extremely bad. His experience corroborated that of the physicians of the Lourcine Hospital of Paris, that very few, indeed, of such cases of infantile syphilis survived. Those who did survive rarely lived beyond the age of thirty five, and were liable to have a sickly existence, during the course of which iritis, periostitis and bone diseases were frequent.

THE INTERNATIONAL MEDICAL CONGRESS.

Section on Diseases of Children.

(*Continued from p.* 402.)

During the discussion on spinal curvature Dr. A. M. D. Bellem, of Lisbon, read a paper on

SPINAL DEFORMITY AND SAYRE'S METHOD.

The author accepted, almost to the full, the principles on which Sayre advocated his especial method of treating spinal deformity. He thought, however, that neither the pelvis nor the shoulder afforded a fixed point for securing immobility of the spine. In hot countries the bandages must be changed at least once a month. One of its disadvantages was that it interfered with sea-

bathing, and also with general cleanliness. The author did not approve of the "jury-mast:" it rendered the patients uncomfortable, even if they did not actually resist its application. Anæsthesia, he thought, ought never to be attempted. Six months, he found, did not always suffice to restore a diseased spine to its natural condition.

THE TREATMENT OF SPINAL CURVATURE.

C. H. Golding-Bird, M.B., F.R.C.S., London, said that, of the four deforming affections of the bones, including the spinal column, only three were found in children, viz., caries, rachitis and "general curvature." The fourth, osteomalacia, did not concern this question. These diseases being familiar to all, attention was only drawn to their treatment as affecting the spinal column. This fundamental fact must first be admitted, that these affections were the same, whether in the spine or other bones; therefore the essential principles of treatment were identical in both cases. Therapeutically, spinal diseases (in children) formed two classes: *a.* Inflammatory (caries or "Pott's disease"); *b.* Non-inflammatory (rickets and general curvature). Caries (as in the tarsus), being inflammatory, required absolute rest, immobility, relief from pressure, and free drainage of pus when formed. Rachitis and "general curvature" (as in curved tibiæ and some flat feet) required temporary support to the weakened tissues and improvement of muscular tone. All required suitable medicinal treatment. Sayre's method, as applied to spinal cases, fulfilled all these requirements; the "jacket" was but a part of the whole treatment. The jacket of plaster of Paris, closely applied during extension, either vertical or horizontal, gave the necessary "physiological rest" to an inflamed spine, while to both this and to the non inflamed it gave relief from downward pressure, thus maintaining whatever of straightness was gained by the extension. The jacket effected this by being a solid investing carapace, that would not yield the necessary lateral space required as a compensation for a diminished height on ceasing the extension, and not by any pressure upward or downward, or from side to side, like the old pieces of "spinal" mechanism, which only gave a very general sort of support. Since obviously the full limit of extension reached could not be maintained by the jacket, it was requisite in "general curvature" (rachitic children were usually too young) daily to practice Sayre's self-suspension from the head, so as to periodically open up the spine to its greatest extent, and exercise the weakened dorsal muscles. Early cases of "general curvature" were thus cured, even without the jacket; and children took very readily to the exercise. Thus, by making the support to the spine an integral part of the patient, the patient could exercise out of doors as before, and that with ease and comfort; the reclining board was no more required. If the jacket were cut up, or were made of such material as felt, it was not nearly so efficient; it ceased also to maintain the chest in the position of full inspiration, calculated to give most play to the thoracic organs. In caries rest was the principal object, and for this the jacket sufficed; in general curvature and rachitis extension and support were paramount; hence daily exercise was as important as the jacket. In early and moderate cases of general curvature cure might be confidently expected; that more advanced cases derived little benefit was due to other causes than to the mechanical means being insufficient.

Henry F. Baker, F.R.C.S.Ed., London, divided the subject into the following parts: (1) The suitableness of this form of treatment under discussion in cases of angular curvature; (2) at what stage in the treatment of the curvature it should be used; (3) its suitableness in cases of lateral curvature; (4) whether the whole method of treatment should be carried out, or only a part. In the first place, with regard to angular curvature, the author considered that in the acute stage of the disease extension was attended with danger; and that, in the more advanced cases, when ankylosis had taken place, it had no effect at all on the deformity, and that it should never be practiced in these cases. In reference to the use of the plaster jackets, for the treatment of angular curvature, he considered that it did not give the required rest to the spine, and that it was likely to constrict injuriously the chests of growing children, and that a state of recumbency was absolutely necessary to prevent the deformity from increasing in the first stage of the disease. In a very limited number of cases, when the disease had been arrested and other forms of support could not be obtained, it was undoubtedly of use. In cases of lateral and other curvatures of the spine which are not accompanied by diseased bone, Mr. Baker was of opinion that suspension in the way suggested by Dr. Sayre was a useful addition to other modes of treatment, but that in those cases in which some form of support was absolutely necessary, plaster jackets were very inferior to those made of steel, which could be adjusted at any time by the surgeon attending the patient.

Quite a lengthy discussion followed the reading of these papers, in which Dr. Sayre himself took part, mainly for the purpose of condemning the case of an anæsthetic during suspension.

The next subject of discussion was

RUBEOLA OR RÖTHELN,

which commenced with a paper from Dr. W. B. Cheadle, of London. He said: That one attack of a contagious exanthem conferred upon the individual who experienced it immunity from any further attack of the same disease, was a rule which had been found to hold good with regard to measles as generally as it did in the case of scarlatina or smallpox. Yet in two recent epidemics, both of them of severe and pronounced type, which occurred in succession in the same district within the year, it was found that the individuals who suffered in the first epidemic obtained no immunity from the second; and, further, that no previous attacks whatever of ordinary measles exercised any protective power against the second epidemic. Of thirty cases of this second epidemic, in which absolutely trustworthy histories could be obtained, twenty-two of the patients had had measles before, and ten of these under the author's personal observation, within the year. Certain deviations from the common type, such as a shorter period of in-

cubation, severe laryngeal symptoms and other special features, taken together with the fact that previous attacks of ordinary measles conferred no protection, proved the disease of the second epidemic to be an essentially distinct exanthem. The question then arose whether it was a new and unrecognized form of eruptive fever, or the only other known form of measles, rötheln. The exceptionally severe and even malignant character of the disease at the outset would seem to negative the idea of rötheln, which was always described as a disease of an invariably mild type. But, after weighing all the facts, the conclusion was arrived at that the disease was rötheln, which prevailed not only in the slight form which was acknowledged, but in a severe and malignant form also, hitherto not recognized as rötheln; but erroneously described as an exceptionally severe variety of common measles.

ON THE REAL POSITION OF RÖTHELN, BUBEOLA OR GERMAN MEASLES.

W. Squire, M.D., London, gave a short historical survey of the literature of this disease, and showed that it was known before it received a distinctive name. He said that the disease, in his opinion, had but a superficial resemblance to scarlet fever, but had close relations to measles in several points. But it was self-protective, was as distinct from measles as varicella from variola, and possessed all the marks of a specific disease. It was contagious, it ran a definite course, and it occurred but once in the same person.

Dr. Kassowitz, Vienna, said that in the epidemic of rötheln which had come under his observation he had never noticed the affection passing into true measles. The resemblance to measles was nevertheless sometimes so marked, both as regards the eruption and the associated phenomena, that in any single case the distinction from the milder form of measles, which ran a rapid course, was rendered extremely difficult, and, in such circumstances, could generally only be made by having regard to other cases in the same house and family. If this affection had any special relationship, it was to measles, not scarlet fever.

The subject of

DIPHTHERIA

was opened by a paper from Dr. Jacobi, of New York. He said that the nature of the contagion was probably chemical. The presence of bacteria in diphtheria did not prove its parasitic character. The entrance of the diphtheritic poison was not the same in all cases. In some the origin of the disease was local. In others the poisoning of the blood by inhalation was the first step. In some, both modes of infection acted simultaneously. Diphtheria was very contagious. Both the patient and his surroundings, dwelling, furniture, towels, visitors, etc., conveyed the disease, and might do so after a long time. The contagion rose upward with the current of warm air in dwellings. It clung mostly to mucous membranes not endowed with many muciparous follicles. Mild cases might communicate serious ones, and *vice versa;* and recent wounds were affected easily and speedily. The disease had been contracted from animals. It attacked children under three months of age, and those over seven or eight mostly, and mainly such as had been affected previously. Local paralysis of the soft palate, and sometimes of the muscles of deglution and the glottis often attended the local deposits on these parts, with œdematous swelling of the same. The diphtheritic paralysis, properly so called, was an affection of apparent convalescence. The majority of cases occurred after mild attacks; sometimes after those with but little fever and a slow general course. It did not usually occur in cases complicated with albuminuria and nephritis. There was no symptom during the attack indicating future paralysis. Albuminuria was often found in diphtheria, but was mostly no grave symptom. It appeared to be the result of rapid elimination of the poison. Acute diffuse nephritis appeared at an earlier period than in scarlatina.

ON DIPHTHERITIC PARALYSIS AND ALBUMINURIA.

John Abercrombie, M.D. (London), said that, from an analysis of sixteen cases, he found that the paralysis generally appeared from two to five weeks from the commencement of the diphtheria. The earliest symptom, in the majority of cases, was return of fluids through the nose, or some other difficulty in swallowing. All the cases he referred to were instances of general paralysis. Irregular action of the heart was found in several cases, as also albuminuria; while paralysis of accomodation was ascertained, or could be inferred, in a considerable number. Paralysis of the muscles of the chest-wall was present in more than half the cases, and found to be a sign of very grave import The so-called "patellar-tendon reflex" was found to be absent in all the cases in which it was investigated. Anæsthesia of the soft palate was generally found, but no marked loss of cutaneous sensibility. The muscles responded well to the induced current in the few cases where it was tried. In the cases that recovered, the paralytic symptoms generally lasted from five to six weeks; but in one they persisted for fifteen weeks. Of the fatal cases, two died about the ninth day from the onset of paralytic symptoms; but the average duration was about three weeks. He had not found such marked changes in the spinal cord as those described by M. Déjérine; but in some cases changes were observed in the central canal, and multiplication of the corpuscles in the neuroglia; and in others a globular condition of some of the large motor cells in the anterior cornua, with disappearance of their processes. Belladonna was the only drug which seemed to exert any influence over the disease, and its use in large and frequently repeated doses was recommended. As to the albuminuria, he had found it to occur in about one-fourth of the cases. It was difficult to fix the date at which albumen first appeared in the urine, as it was often present when the patients came under observation; but in one very malignant case he found the urine highly albuminous within twenty-four hours of the first symptom. He had never seen albuminuria commence later than the tenth day of the disease. In cases that recovered, it usually lasted only a few days; and he had only once seen it last more

than a fortnight. In fatal cases, as a rule, the albuminuria persisted till death; in one patient, however, it disappeared two days before the fatal result. He had never seen it associated, either at the onset or during its course, with anasarca. The urine was generally clear, hardly ever smoky; and he had not observed any case presenting symptoms of uræmia. The changes found after death were those of parenchymatous nephritis. The presence of albumen in the urine was always an unfavorable sign, especially so in those cases where laryngeal symptoms coexisted.

TRACHEOTOMY IN DIPHTHERIA.

Professor Buchanan, Glasgow, considered that tracheotomy was justifiable in diphtheria as well as in croup (if they were not identical diseases), but only in the sthenic or simply suffocative form. The type and stage of the disease demanding tracheotomy was best recognized by observation of the naked chest. The operation should be performed with the utmost deliberation, and the higher up the trachea the better. In the after-treatment, all medicine should be abandoned, and reliance placed solely on nourishing food, with copious supply of fresh air, at a proper temperature, the moisture being secured by a porous sponge kept moist and hot, or a little loose gauze placed over the mouth of the tube, which should be kept scrupulously clean and clear.

THE SURGICAL TREATMENT OF CROUP AND DIPHTHERIA BY THE INTRODUCTION OF TUBES INTO THE TRACHEA THROUGH THE MOUTH.

W. Macewen, M.D., Glasgow, related several cases in which he had introduced flexible tubes into the trachea through the mouth, and gave details of one case of membranous croup in which their use had been attended by marked success. He showed a flexible silver tube, and some gum-elastic tubes; the latter he found the more satisfactory. Dr. Robertson, Glasgow, had seen some of Dr. Macewen's cases, and could confirm the statement that the patients' voices were unaffected, even in the case of the patient in whom the tube was retained for thirty-six hours. He had seen the fourth case, and he found that the breathing took place freely through the tube. The respiratory murmur seemed quite full and free at the base of the lungs, showing that air was freely admitted. There was no difficulty in swallowing.

(*To be continued.*)

Editorial Department.

Periscope.

Obstetrical Auscultation.

In a clinical lecture (translated from the *Revue Médicale*, No. 7, in the London *Medical Times and Gazette*), Prof. Depaul, after adverting to the history and progress of obstetrical auscultation, to which no one has contributed more than himself, proceeded to explain to his class how best to perform it. The woman should be laid on a bed, on her back, for although she can be auscultated while standing, this is very inconvenient, and may give rise to serious mistakes. The abdomen should be exposed, free from all garments, especially among common women, whose coarse clothing might give rise to difficulty in the perception of sounds. In private practice it may be possible to make an examination over a chemise of fine linen. The physician must place himself on her left and right side, so as to make the examination of both sides alternately, the most complete silence being observed. The auscultation must be made by means of the stethoscope, and after having tried the various forms of this instrument, Prof. Depaul has finally adopted one of medium length, having its auricular surface slightly excavated, and the edges of the opposite aperture sufficiently thick to prevent disagreeable or painful sensations being caused. The wall of the abdomen and that of the uterus must be somewhat depressed, but only moderately so, as any strong pressure would modify the sounds to be perceived, and especially the *souffle*. Some women refuse to allow of auscultation, but a little persuasion and explanation of the objects in view usually overcome their objections. There are others, again, who have the abdominal surface in a state of hyperæsthesia, the slightest touch, according to their account, causing pain. Moreover, in morbid conditions of the respiratory organs, the various pathological sounds produced may render the uterine auscultation difficult.

It is towards the third month and a half or the fourth month that auscultation is of service, and the sounds produced are of two kinds, those proceeding from the pregnancy itself and those which are independent of it. Of the first, there are the uterine *bruit de souffle* and the double sound resulting from the contractions of the fœtal heart, the fœtal *souffle* dependent upon the circulation of the fœtus, and the uterine *souffle* dependent upon the maternal circulation. Finally, there are sounds due to the active movements of the fœtus, as the *bruits de choc*, which may be both perceived by the hand and heard by the ear. We may also perceive by palpation, as well as by the ear, a friction sound (*bruit de frottement*). As to the sounds independent of pregnancy which are heard in women with child, it is of importance not to confound them. They may arise from the constriction of the muscles of the abdomen, or from the vesicular expansion of the lungs, which in some women extend from above downward. So also the sounds produced by the beating of the heart of the mother may be transmitted to the cavity of the abdomen, and these are to be distinguished from those of the fœtus by their isochronism with the pulse. Finally,

there are the pulsations of the aorta and the sounds due to the presence of gas in the digestive canal, especially in nervous and impressionable women.

Administration of Cinchona to Children.

Having had several cases of intermittent fever lately in the Enfants Malades, Dr. Jules Simon addressed some observations (*Gaz. des Hôp.*, August 25) to his class, on the above subject. It is seldom, he observes, that powdered bark is administered to children; but still it is sometimes given, in *café noir*, after the age of four or five, in quantities of two or three grams daily. For his own part, he prefers one or two grams daily of the soft extract for children when more than two years old. Before that age it causes indigestion, as does also the vinum cinchonæ. Even the syrup can scarcely be borne while the child is still suckling. After the second year, the vinum is a very good medicine —that is, on the condition that it is prescribed properly. We may often see pale, anæmic little girls, for whom bark wine, iron, or phosphate of lime, etc., has been prescribed, and has done more harm than good. Certainly for the first few days a dessertspoonful of cinchona wine given before a meal (as it is generally ordered) will produce a stimulus and a better appetite and tone; but the improvement is only temporary, and we soon find that the appetite is lost again, pains of the head supervening, and the child becoming nervous, etc. Why is the improvement of so short a duration, and more apparent than real? Owing to a slight precaution being forgotten—the dilution of the cinchona wine with a little water. So diluted, and administered immediately before the meal, it will cause no inconvenience. Still, if, in spite of the addition of a small quantity of water, dyspepsia and headache should still supervene, or if constipation should occur, the cinchona should be suspended for a time. This addition of water to the wine is of very great importance, as is the suspension of the medicine when any great susceptibility exists; and the observation holds good also with regard to quinine wine. Syrup of cinchona is a tonic which may be given to a child after its fifteenth month, and the alcoholic tincture may be begun with after the second year—associating it advantageously with bitter preparations. The action of cinchona upon the alimentary canal is complex, giving tone, appetite. and slight constipation when properly administered, and inducing dyspepsia when given badly. It renders the pulse stronger, fuller, and more regular, and aids the development of the blood globules. It acts favorably on the nervous system when properly prescribed, but only does mischief when the precautions mentioned are not observed—producing stomachal vertigo and an irritability of disposition. Cinchona also has the property of diminishing the urinary secretion, and is contra-indicated in cases in which this is deficient.

Of the salts of quinia, the sulphate is the only one Dr. Simon employs, giving it in powder in *café noir*, or, when the child is old enough, in a wafer. Owing to its bitterness, it may be given in silvered pills of a centigram each, which can be concealed in preserve. When the child refuses it thus, it may be given in solution, facilitating its tolerance and preventing griping by a little opium, which does not interfere with the effect of the quinine. It is best given immediately before meals. Quinine may also be given advantageously in an enema in rather larger doses and combined with a drop of laudanum. Used externally, in the form of an ointment made up with equal parts of lard, the quinia is only found in the urine by the third day in children above two years of age, and somewhat earlier in those who are younger.

Why Does Labor Come On?

Dr. A. Geyl, of Dordrecht, in the *Archiv für Gynäkologie*, applied the Darwinian theory to answer the questions, to which so many more or less imperfect replies have been given: Why does labor come on? and, Why does it come on at the end of the ninth month? Dr. Geyl's view is this: that it depends upon an inherited tendency to expel the child as soon as it has reached the stage of development most favorable to its separate existence, and yet permitting of its passage through the pelvis. A woman with a tendency to expel the child too soon, before it was properly viable, or to retain it too long, till it was too big to traverse the pelvis, would not, of course, transmit this peculiarity to any descendant. And it is obvious that the offspring of those mothers who expelled their young at precisely the most favorable time, when the greatest degree of development compatible with safe delivery had been reached, would have a better chance of surviving than those born a little too early or too late. Dr. Geyl explains the wide differences in the duration of pregnancy by supposing that peculiarities in this direction are transmitted; *i. e.*, given a race of women with small pelves, it would be to the advantage of that race, if with the small pelvis went a tendency to the expulsion of the child before it had got very big; in the absence of that tendency the race would die out, If this were the only cause, it is plain that in the same woman pregnancy ought to always last nearly the same length of time. Dr. Geyl adduces some, but very incomplete, evidence in support of his theory. The theory, however, if true, is not an explanation. We have yet to know the mechanism by which such adaptation is effected.

The Heredity of Color Blindness.

In a late lecture on heredity, Prof. John Hutchinson speaks of color blindness:—

This, which is much more frequently found in men than in women, and is very common among Jews, presents many puzzling features to account for. It is remarkably hereditary, and Dr. Wilson, who has given much time to its study, declares that for each case observed at least one other occurs, as is true also of ichthyosis. Color-blindness, however, is not entirely confined to the male sex, although united tes imony agrees in ascribing it much more commonly to males

than to females. The classes most usually affected are the uneducated, Jews and Quakers. At birth, possibly, there may be no more than a proneness to the condition in the infant, which, however, becomes intensified into actual defect at a very early age. It is certainly not associated with any structural omission, either in the eye or brain, nor can it be cured when it is definitely developed. There are facts tending to prove that an affected female may transmit the tendency to her offspring, and that succeeding generations are then influenced in direct descent; but such an occurrence is, nevertheless, very uncommon. That the male parent may transmit the disease to sons is generally observed, as also that daughters very commonly escape, the exemption being due in some degree to sexual prepotency, but also to the fact that the color sense in the female is both more definitely developed and more rigorously cultivated than is the case with males. The comparative neglect of the color-sense among Jews and Quakers, too, will serve to explain the frequency of color-blindness in those two races during the period of education. In the case of Quakers, too. education has played an important part, and many whose color-sense has been offended by the subdued coloring of Quaker surroundings have, from time to time, removed themselves from the sect, thus intensifying the tendency in the remaining members. As well will this explanation apply to the absence of a musical sense, which is associated with color-blindness very often. Mr. Hutchinson suggested that intermarriage among Jews and Quakers has strengthened the hereditary tendency to this defect. Its non-occurrence among highly cultivated classes is an undoubted fact, and tends to illustrate the high perceptibility of the sense.

Iodoform in Porrigo Decalvans.

Speaking of iodoform, Dr. W. Frazer says, in the *British Medical Journal*: I feel desirous of directing special attention to the properties it possesses of promoting the cure of that very troublesome affection, porrigo decalvans. The best results that I have, as yet, obtained in this disease have followed the application of vesicating collodion over the affected spot, and for a short distance around it. Previous to this it is well to epilate all diseased hairs over the spot. and, when the blister is healing, the ointment of iodoform should be applied night and morning, or oftener, and by this treatment the hair soon appears in a healthy condition. A few weeks since a case came under my charge, where croton oil had been applied with exceptionally disastrous results, and which may serve as a caution against its use. The little sufferer, a strumous child of about six years of age, had some diluted croton oil rubbed into the spots of porrigo scattered over her head; it produced violent local irritation, which extended over the entire scalp and the face, where confluent patches of exudation formed, and much of the back of the neck was also affected, the glands of the neck becoming swollen. The entire body and limbs became of a deep red color, like scarlatina or erysipelas, and studding this were numerous suppurating points. This affection may have originated through the child applying its hands to the scalp saturated with the croton-oil, and then transferring the irritant to the rest of the body; but I am inclined to think this would only explain some of the results, and that there was an outbreak of cutaneous rash, like what we see in acute eczema. At all events, the condition was one of extreme misery, and the poor sufferer was equally distressed in mind, declaring that she would go "mad" with the constant burning pain, tingling and irritation. I applied vaseline over all the body, as in a case of extensive burn, and after a fortnight the attack subsided, the cuticle desquamating. The ointment of iodoform was then used for the eruption of porrigo, which, it may be stated, was still increased and extending, dispersed through the hair in scattered patches; the result, after a time, was all that could be desired. It is needless to describe the constitutional treatment which was employed at the same time. It is well to be cautious in applying croton oil, unless with great care and discrimination; some skins possess an exceptional degree of sensibility to the action of this irritant, which is quite capable not only of affecting the special parts to which it is applied, but, in such individuals of originating an acute dermatitis over the entire body, as it did in this girl.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——According to the announcement of the *Atlanta Medical College* the twenty-fourth annual course of lectures will commence October 12th, 1881, and close March 2d, 1882.

——We have also received, in a reprint from the *Journal of Nervous and Mental Diseases*, for July, 1881, a second contribution to the Study of Localized Cerebral Lesions, by the same author.

——We have received a copy of the Constitution and Report of Proceedings of Annual Meeting, March 18th, 1881, of the Alumnæ Association of the Woman's Medical College of Pennsylvania.

——Dr. Ralph L. Parsons, of Greenmont-on-the-Hudson, near Sing Sing, N. Y., sends us, in a reprint from the *Alienist and Neurologist* for October, 1881, a valuable paper on the Private Care of the Insane, to which we shall have occasion to refer elsewhere.

——*Pleural Effusions, with Special Reference to Pyothorax*, is the subject of an address delivered before the Medical Society of New Jersey by Dr. Alex. N. Dougherty, It comes to us in the form of a pamphlet extracted from the Transactions of the Society.

——The annual announcement of the course of lectures delivered in the *Philadelphia School of Anatomy* for 1881–82 (forty-third year) is before us. This institution has an able staff of instructors, and affords special advantages to students and practitioners who wish to take a thorough course in practical medicine and surgery.

——The *Central College of Physicians and Surgeons*, Indianapolis, Ind., announces the following programme for its third annual course: The preliminary course will commence on Wednesday, September 14th, 1881, and continue until the commencement of the regular session. The regular session will commence on Monday, October 3d, 1881, and continue till March 1st, 1882.

——A reprint from the *Medical Record*, August 6th and 13th, 1881, of an essay on the Importance of the Early Recognition of Epilepsy, which was read before the Connecticut State Medical Society, May 26th, by Dr. E. C. Seguin, of New York is before us. A number of cases are recorded, illustrating how, through errors in diagnosis, proper treatment has been delayed for months and years, perhaps until the stage of curability has been passed. The author enumerates the chief diagnostic symptoms of the disease by which it may be distinguished from other forms of eclampsia.

BOOK NOTICES.

Antiseptic Surgery, the Principles, Modes of Application and Results of the Lister Dressing. By Dr. Just Lucas Championnière, Surgeon to the Hôpital Tenon, Member of the Société de Chirurgie, Editor of the *Journal de Médecine et de Chirurgie Pratiques*. Translated from the second and completely revised edition, with the special sanction of the author, and edited by Frederic Henry Gerrish, A M., M.D., Surgeon to the Maine General Hospital, Professor of Materia Medica and Therapeutics in Bowdoin College, etc. Portland: Loring, Short & Harmon, 1881. Cloth, 8vo, pp. 239.

The work before us is an exhaustive treatise on antiseptic surgery, the principle on which it is based and the means by which it may be accomplished, together with a full description of the method developed by Professor Lister and bearing his name. With this method the author had made himself acquainted in 1867, had seen it applied in Glasgow in 1868, and described it to the French surgeons in January, 1869. Since then he has been one of its most enthusiastic advocates, and in 1875 he introduced it in his hospital service. At first it met with a most discouraging reception, but the success attained was so great that its application in surgical practice throughout France is now almost universal. The author insists on a strict adherence to Lister's method in all its details, and where this has been complied with he says that surgical complications do not occur, wounds heal with a rapidity and regularity hitherto unknown, and the most formidable operations may be performed to-day in the Paris hospitals, which a few years ago were reckoned among the most unhealthy, with the same safety as out in the pure country air. As antiseptic surgery does not consist merely in the free use of carbolic acid, as many believe, but in the strict attention to innumerable details, all having for their object the exclusion from wounds of atmospheric germs, and the perfect union by first intention, and as a most minute description of these details is given, and their application to special operations dicussed, we cannot but regard the book as one of the most valuable contributions to surgical literature, and the profession on this side of the Atlantic is greatly indebted to the translator for having placed within their easy reach a work which cannot but prove of inestimable value to all those who practice surgery.

A Manual of Practical Normal Histology, by T. Mitchell Prudden, M D., Director of the Physiological and Pathological Laboratory of the Alumni Association of the College of Physicians and Surgeons, N. Y.; Lecturer on Normal Histology in Yale College; Pathologist to the Manhattan Eye and Ear Hospital. New York: G. P. Putnam's Sons, 27 and 29 West 23d street. 1881. Cloth, small 8vo., pp. 265. Price, $1.25.

This work is not intended to supplant any of the larger text books on histology, but rather to serve as a laboratory-guide in the microscopic study of normal tissues. It is exceedingly well written and the subject systematically arranged in chapters, beginning, after a brief introduction, in which the most practical methods of preparing and mounting are described, with the cell in general, and then taking up successively the various tissues, concluding with the histology of special organs. No illustrations are introduced, the author intending that the students shall themselves make sketches from the specimens they prepare. Students and practitioners who wish in a practical way to acquaint themselves with normal histology will find this a useful little book.

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THE GERM THEORY AT THE INTERNATIONAL MEDICAL CONGRESS.

The relation of germs, or, more properly, minute organisms, to the causation and propagation of disease and diseased conditions, is so leading a question, and has so many bearings on both surgery and medicine, that we have reserved for a synoptic view the principal addresses on this subject presented to the International Congress. The leading one was by the veteran M. PASTEUR, which was entitled "On Vaccination in reference to Chicken Cholera and Splenic Fever." It is next to impossible to do justice to this by an abstract. We prefer to make from it a long extract, which will give the manipulations and methods of investigations used in his researches on chicken cholera, as they indicate the plan pursued in these fruitful studies generally. He said:—

Let us take a fowl which is about to die of chicken cholera, and let us dip the end of a delicate glass rod in the blood of the fowl, with the usual precautions, upon which I need not here dwell. Let us then touch with this charged point some *bouillon de poule*, very clear, but first of all rendered sterile under a temperature of about 115° Cent. (239° Fahr.), and under conditions in which neither the outer air nor the vases employed can introduce exterior germs—those germs which are in the air or on the surface of all objects. In a short time, if the little culture vase be placed in a temperature of 25° to 35° Cent. (77° to 95° Fahr.), you will see the liquid become turbid and full of tiny micro-organisms, shaped like the figure 8, but often so small that under a high magnifying power they appear like points. Take from this vase a drop as small as you please, no more than can be carried on the point of a glass rod as sharp as a needle, and touch with this point a fresh quantity of sterilized *bouillon de poule* placed in a second vase, and the same phenomenon is produced. You deal in the same way with a third culture vase, with a fourth, and so on to a hundred, or even a thousand, and, invariably, within a few hours the culture liquid becomes turbid and filled with the same minute organisms. At the end of two or three days' exposure to a temperature of about 30° Cent. (86° Fahr.), the thickness of the liquid disappears, and a sediment is formed at the bottom of the vase. This signifies that the development of the minute organism has ceased—in other words, all the little points which caused the turbid appearance of the liquid have fallen to the bottom of the vase; and things will remain in this condition for a longer or shorter time, for months even, without either the liquid or the deposit undergoing any visible modification, inasmuch as we have taken care to exclude the germs of the atmosphere. A little stopper of cotton sifts the air which enters or issues from the vase through changes of temperature.

Let us take one of our series of culture preparations—the hundredth or the thousandth, for instance—and compare it in respect to its virulence with the blood of a fowl which has died of cholera; in other words, let us inoculate under the skin ten fowls, for instance, each separately, with a tiny drop of infectious blood, and ten others with a similar quantity of the liquid in which the deposit has first been shaken up. Strange to say, the latter ten fowls will die as quickly and with the same symptoms as the former ten; the blood of all will be found to contain after death the same minute infectious organisms. This equality, so to speak, in the virulence both of the culture preparation and of the blood, is due to an apparently trivial circumstance. I have made a hundred culture preparations—at least, I have understood that this was done—without leaving any considerable interval between the impregnations. Well, here we have the cause of the equality in the virulence.

Let us now repeat exactly our successive cultures with this single difference, that we pass from one culture to that which follows it, from the hundredth to, say, the hundred and first, at intervals of a fortnight, a month, two months, three months or ten months. If, now, we compare the virulence of the successive cultures, a great change will be observed. It will be readily seen, from an inoculation of a series of ten fowls, that the virulence of one culture differs from that of the blood and from that of a preceding culture, when a sufficiently long interval elapses

between the impregnation of one culture with the micro-organism of the preceding. More than that, we may recognize by this mode of observation that it is possible to prepare cultures of varying degrees of virulence. One preparation will kill eight fowls out of ten, another five out of ten, another one out of ten, another none at all, although the micro-organism may still be cultivated. In fact, what is no less strange, if you take each of these cultures of attenuated virulence at a point of departure in the preparation of successive cultures and without appreciable interval in the impregnation, the whole series of these cultures will reproduce the attenuated virulence of that which has served as the starting point. Similarly, where the virulence is null, it produces no effect.

How, then, it may be asked, are the effects of these attenuated virulences revealed in the fowls? They are revealed by a local disorder, by a morbid modification more or less profound in a muscle, if it is a muscle which has been inoculated with the virus. The muscle is filled with micro-organisms, which are easily recognized, because the attenuated ones have almost the bulk, the form, and the appearance of the most virulent. But why is not the local disorder followed by death? For a moment, let us answer by a statement of facts. They are these: the local disorder ceases of itself more or less speedily, the micro-organism is absorbed and digested, if one may say so, and little by little the muscle regains its normal condition. Then the disease has disappeared. When we inoculate with the micro-organism the virulence of which is null there is not even local disorder; the *natura medicatrix* carries it off at once; and here, indeed, we see the influence of the resistance of life, since this micro-organism the virulence of which is null multiplies itself.

A little further, and we touch the principle of vaccination. When the fowls have been rendered sufficiently ill by the attenuated virus which the vital resistance has arrested in its development, they will, when inoculated with virulent virus, suffer no evil effects, or only effects of a passing character. In fact, they no longer die from the mortal virus, and for a time sufficiently long, which in some cases may exceed a year, chicken cholera cannot touch them, especially under the ordinary conditions of contagion which exist in fowl-houses. At this critical point of our manipulation—that is to say, in this interval of time which we have placed between two cultures, and which causes the attenuation, what occurs? I shall show you that in this interval the agent which intervenes is the oxygen of the air. Nothing more easily admits of proof. Let us produce a culture in a tube containing very little air, and close this tube with an enameller's lamp. The micro-organism in developing itself will speedily take all the oxygen of the tube and of the liquid, after which it will be perfectly free from contact with oxygen. In this case it does not appear that the micro organism becomes appreciably attenuated, even after a great lapse of time. The oxygen of the air, then, would seem to be a possible modifying agent of the virulence of the micro-organism of chicken cholera—that is to say, it may modify more or less the facility of its development in the body of animals. May we not be here in presence of a general law applicable to all kinds of virus? What benefits may not be the result? We may hope to discover in this way the vaccine of all virulent diseases; and what is more natural than to begin our investigation of the vaccine of what we in French call *charbon*, what you in England call splenic fever, and what in Russia is known as the Siberian pest, and in Germany as the *milzbrand*.

Pursuing this investigation into splenic fever, it was rewarded with such practical and beneficial results that it was demonstrated that this destructive plague, which annually carries off animals in France to the value of four million dollars, could be stayed by proper inoculation.

The demonstrations of Dr. Robert Koch, of Berlin, were not less rich in matter. He showed, in beautifully accurate experiments, the modes of cultivating and reproducing microscopic organisms. He exhibited specimens of *micrococcus prodigiosus*, which produces a red pigment, and also of the bacillus which causes blue pus, and that which causes blue milk. Other forms of bacilli were shown which microscopically were indistinguishable, but which could be at once separated from each other by differences in their mode of growth on solid substances. The advantages of a solid rather than a liquid cultivating material being thus apparent, Dr. Koch next turned his attention to the solidification of other cultivating materials, such as would nourish pathogenic bacteria, and he found that by the addition of gelatine to the fluid, used in the proportion of three or four per cent., a solid cultivating material was obtained, whose power of nourishing organisms was not in any way interfered with by the presence of the gelatine.

Some of this material, being rendered fluid by heating and spread out on a slide, was allowed to solidify, and then bacteria could be sown on it, and their mode of growth watched with a low power of the microscope. Thus a minute quantity of dry earth was scattered over such a slide, and in a few hours development could be seen to be accruing around almost every particle. In this particular specimen seven different sorts of bacilli were present; many of these could not have been distinguished from each other by the

microscope, but a difference was at once observed between their mode of growth on the solid substance, some forming round balls, others growing out in a star-shaped manner, others growing in a fine network, etc.

In the same way the number and nature of the organisms present in any given quantity of air could be estimated. A broad, shallow vessel was filled with the gelatine mixture and exposed for a given time to the air. At every point where an organism fell on it growth occurred, and thus the number and nature of the organisms present could be at once ascertained. But, further, as each organism was a pure cultivation, pure flasks could be inoculated from each variety, and thus its further life-history and pathogenic characters could be investigated.

Similarly with water. The material in a test-tube having been rendered fluid, a given quantity of water was shaken up with it till solidification occurred. At every point where an organism was present in the water, development occurred, and thus the number and nature of the organisms present in a given specimen could be at once ascertained.

Dr. Koch also exhibited some of his pathogenic bacteria. Animals which had been killed with anthrax were shown, The fatal nature of the poison was demonstrated ; the constant presence of the *bacillus anthracis*, its mode of growth in the gelatine substance, and its virulent properties after being grown in it, were all made apparent. The bacillus of mouse septicæmia, which is described in his work, was shown in a similar manner. For several months this organism had been cultivated in gelatine blood serum, forming a fine cloudy mass and retaining its form and other characteristics. A minute drop of this was placed under the skin of a mouse. This animal died in forty-eight hours ; and in its blood were numerous bacilli. Another mouse inoculated from this blood also died. In gelatine inoculated with this blood these organisms developed ; and after further cultivations with this, the minutest drop killed another mouse. Septicæmia was shown in pigeons, rabbits, mice, etc., due to a minute bacillus of peculiar form, resembling in appearance the organism of the "*choléra des poules*" of Pasteur. The same sort of proof was given with regard to this organism as in the former case. And lastly, a beautiful form of erysipelas was shown in the ear of rabbits, caused by the inoculation of the rod shaped bacillus of the septicæmia of mice; this sometimes, though not always, killed the animals.

In the section on pathology an address was delivered by Dr. E. Klebs, on the relations of minute organisms to certain specific diseases. We give an extract showing the scope of his paper, and incidentally what may be said to be the latest work on this interesting subject. Referring to the three great groups of lower organisms *Hyphomycetæ*, the *Algæ* and the *Schizomycetæ* he says :—

The *schizomycetæ* furnish, without doubt, by far the most numerous group of infective diseases. We distinguish within this group two widely different series of forms, which we will speak of as bacilli and cocco-bacteria respectively. The former, which was first exhaustively described by Ferdinand Cohn, and the pathological importance of which, especially in relation to the splenic disease of cattle, was first shown by Koch, consist of threads, in the interior of which permanent or resting spores are developed. These spores, becoming free, are able, under suitable conditions of life, again to develope into threads. The whole development of these organisms, and especially the formation of spores, is completed on the surface of the fluids, and under the influence of an abundant supply of oxygen.

The number of affections in which these organisms have been found, and which may be, to a certain extent, produced artificially by the introduction of these organisms into healthy animal bodies, has been largely increased since the discovery of Koch, that the bacteria or splenic fever (anthrax) belong to this group. Under this head must be placed the Bacillus malariæ (Klebs and Tommassi-Crudeli), the bacillus typhi abominalis (Klebs, Ebert), the bacillus typhi exanthematici (Klebs, observations not yet published), the bacillus of hog cholera (Klein), and finally the bacillus leprosus (Neisser). It would exceed the time appointed were I to attempt to describe these forms more minutely. This may, perhaps, be better reserved for discussion and demonstration.

All the diseases named possess one very remarkable property common to them all. They arise from influences which are conveyed to the human body more or less directly from the soil. The conveyance of disease from man to man is, however, by no means excluded ; and in one of these cases it constitutes, indeed, the most frequent mode of communication. We may, perhaps, assume, from the course of the disease, that cholera and yellow fever also belong to this

group. From the history of their origin we may designate these diseases as soil diseases.

Alongside of these general infective diseases produced by bacilli, local affections also occur, which indicate the presence of these organisms at the point where the disease begins. As an example of these processes, which probably occur in various organs, I would mention gastritis bacillaris, of which I shall show you preparations. In this we can trace the entrance of the bacilli into the peptic glands, as well as their further distribution in the walls of the stomach, and in the vascular system.

At the spot where the bacillus enters, inflammatory processes, gangrene and hemorrhage are observed, while its distribution in the circulation appears to be able to lead to serious alterations of other organs. Thus I have once observed the process in a case of acute atrophy of the liver.

The second group of the pathogenetic schizomycetæ I propose to call, with Billroth, coccobacteria, because they consist of collections of micrococci, which are capable of transforming themselves into short rods. The former usually form groups united by zooglœa; by prolongation of the cocci rods are formed, which sprout out, break up by division into chains, and further lead again to the formation of resting masses of cocci. I distinguish, further, in this group two genera, the microsporina and the monadina; in the former of which the micrococci are collected into spherical lumps; in the latter into layers. The one class is developed in artificial cultivation at the bottom of the cultivation fluid; the other on the surface. The former requires a medium poor in oxygen, the latter a medium rich in oxygen, for their development.

Among the affections produced by microsporina I reckon especially the septic processes, and also true diphtheria. On the other hand, to the processes produced by monadina belong especially a large series of diseases, which, according to their clinical and anatomical features, may be characterized as inflammatory processes, acute exanthemata. and infective tumors, or leucocytoses. Of inflammatory processes, those belong here which do not generally lead to suppuration; such as rheumatic affections, including the heart, kidney and liver affections, which accompany this process, sequelæ which, as is well known, lead more especially to formation of connective tissue, and not to suppuration. Here, also, belong croupous pneumonia, the allied disease erysipelas, certain puerperal processes, and finally parotitis epidemica or mumps.

Among the acute exanthemata, the following may, up to the present time, be placed in this group: variolo-vaccina, scarlatina, and measles. The group of infective tumors is represented by tuberculosis, syphilis, and glanders. Throughout the whole group of cocco-bacteria the demonstration of organisms in the diseased parts encounters difficulties, which vary considerably in the different kinds. The demonstration of the comparatively large coccus—or bacteria-masses in sepsis, diphtheria, and rheumatic endocarditis —is comparatively easy and certain; the same demonstration may be extremely difficult in the case of scattered cocci which never form larger groups. This is especially the case in the monadistic processes, and more particularly those of inflammatory nature, and in the acute exanthemata. Still the observation of a quite fresh specimen is easier, on account of the active mobility of these cocci. They often penetrate into the cells, and cause considerable swelling of them, as I have shown in the case of the monadina of pneumonia, which penetrate the ciliated epithelia of the bronchi.

This comprehensive summary is an admirable statement of what is claimed by the adherents of the so-called "germ theory." The warmth with which it was advocated seems to have alarmed Professor Lister himself, who felt called upon to enter a protest against its indefinite extension. In the course of the debate on the relation of minute organisms to unhealthy wounds, he expressed himself as fearing that the relation of micro-organisms to diseased processes, more especially to inflammations, was being exaggerated. He pointed out that many inflammations, more especially chronic inflammations, were caused by the nervous system, and could not in any way be attributed to the presence of micro-organisms, and the success of counter-irritation in the treatment of inflammations demonstrated the same thing. He was inclined to accept Mr. Cheyne's view, that in many cases inflammations arose independently of organisms, which reached the products of inflammation as a result of the disturbance of the constitution which followed.

This caution, we suspect, was timely, and it certainly merits the attention of the germ theorists, who certainly, in some instances, are becoming quite "cranky" on their hobby.

CONSULTATIONS WITH HOMŒOPATHIC PRACTITIONERS.

The expressions in regard to consulting with homœopaths advanced by Dr. Bristowe and Mr. Hutchinson at the last meeting of the British Medical Association, and which we quoted in our last, have met with unanimous condemnation by the English medical press. The *Lancet* suggested that it was part of a deep laid plan of the Association to force this view of the question on the members. This has been denied, not indeed officially, but by individual members of the

council. Certainly the utterances we refer to were unpalatable to most of them, and met, in fact, on the spot, with general condemnation. Considering the position with relation to the Association which they occupied, the speakers certainly transcended the bounds of propriety in advancing their own private views when speaking in an official or at least in a representative capacity.

We cannot too often impress upon the public that this refusal of regular practitioners to consult with homœopaths does not arise from bigotry and prejudice; it does not arise from the opinion that all homœopaths are either knaves or fools; nor does it arise because we want to crowd homœopaths out of business in order to secure more ourselves. Not at all. None of these is the motive. It is because no regular practitioner can, consistently, with his duty *toward his patient* meet a homœopathic physician in consulation. If each consultant is honest in the opinion he professes, no unity of sentiment with regard to treatment can be reached, and the benefit to the patient is entirely lost. This is so clear that any intelligent layman must at once perceive that to have consultants of the two "schools" meet, is a palpable absurdity.

The matter is well put in a recent address to his students by Prof. ANNANDALE, of the University of Edinburgh. He spoke as follows:

Perhaps the best advice I can give you in regard to the treatment of homœopathy is to treat it as most sensible people treat æsthetics. I have no desire to say anything that is discourteous or personal in regard to homœopathic practitioners themselves. Many of them are educated gentlemen, and are qualified members of our profession; but it is impossible, under present circumstances, that you can have any true sympathy with them in the matter of medical practice. You cannot meet them in consultation, because, although you might agree with them as to the nature or diagnosis of a case of disease, one or other of you must consent to sacrifice your principles and belief when the treatment of the disease has to be decided, and no man with any proper feeling will do this, or should do it, more particularly when the health or life of a human being is concerned.

What we have here said applies quite as well, or even more strongly, to those hybrid practitioners who profess to practice "according to both schools." Any one who does this palters with his own conscience, and deliberately undertakes to deceive the public, because the essence of homœopathy is the sweeping, *exclusive* character of its dogma of the similars, and an honest homœopathist can be nothing but a homœopathist.

Even when, as in the instance of Dr. Kidd, the homœopathic practitioner agrees to be guided entirely by the regular consultant, the question arises, how fair is this to the patient, who has both fees to pay, and who has signified his choice, which he has an undoubted right to exercise, to be dosed by infinitesimals?

We maintain, therefore, that the suggestions opened by the gentleman we have quoted at the outset are ill-timed, impracticable, and can lead to no good result, and ought to be quite as distasteful to homœopathists as to ourselves.

NOTES AND COMMENTS.

Therapeutical Notes.

PERUVIAN BALSAM IN LARYNGEAL ULCERATIONS.

In this disease Dr. M. Schmidt recommends specially antiseptic inhalations of Peruvian balsam. Ten drops of a mixture consisting of two parts of Peruvian balsam to one of spirit of wine, are added to boiling water, and the vapor which rises is inhaled for some time; this is done three or four times a day.

PARSLEY AS AN ANTIGALACTIC.

Dr. Martin, in the *Büll. gen. de Therapeut*, states that if the breasts of a nursing woman be covered with parsley leaves freshly pulled, the application being renewed several times a day, as quickly as the leaves fade, the milk will soon cease to appear. This is an application which may be used when it is impossible to give purgatives or other remedies internally.

PLIABLE IODOFORM.

Dr. Fowler makes a pliable mass for iodoform by mixing it with isinglass and glycerine. The isinglass is reduced to a jelly by steam, and enough glycerine added to give it consistency and pliability. The proportions are as follows: Iodoform, ℥ j.; isinglass, ℥ viij.; glycerine, ℥ iv.

PYROGALLIC ACID AS AN APPLICATION TO SOFT CHANCRES.

MM. Lermoyez and Hitier write very favorably of pyrogallic acid in the treatment of soft chancres, and use the following formula: Pyrogallic

acid and starch, of each 40 parts; vaseline, 120 parts; to be applied twice a day. This acts as a light and superficial caustic on the ulcerated surface, but does not harm the sound skin; it causes slight pain, which soon disappears. Under its influence soft chancres are said to heal up with marvelous rapidity.

INCONTINENCE OF URINE.

Professor Gross advises:—

℞.	Strychniæ,	gr. j	
	Pulv. cantharid.,	gr. ij	
	Morph., sulph.,	gr. iss	
	Pulv ferri,	℈j.	M.

Make 40 pills.

Dose: One three times a day to a child ten years old.

Transmission of Tuberculosis by Vaccine.

At a recent meeting of the Paris Academy of Sciences, M. Toussaint communicated some important results of his investigations into the microbial nature of tuberculosis. He had already succeeded, as Klebs and Cohnheim have, in cultivating these organisms, and had found that two drops of the liquid of the fourth artificial cultivation, inoculated into pigs, rendered them speedily and completely tuberculous. He then vaccinated a cow in an advanced stage of tuberculosis with lymph absolutely pure. The vesicles progressed normally, and with the lymph obtained from them he vaccinated different animals, all of whom subsequently became tuberculous. The significance of these experiments can scarcely be overrated, for though a judicious vaccinator would not use lymph taken from a child who exhibited already evidence of the disease, the chances of cows in whom spontaneous vaccinia may appear, and whose lymph would at the present time be eagerly sought after, being, like so many of their species, tuberculous, are great; and it would seem, in consequence, that the dangers of animal vaccination may be greater than those of human, which are supposed to be avoided by having recourse to the cow. As many who fully believe in the existence of a tuberculous microbion have failed in their attempt to cultivate it, we shall at the earliest opportunity give the details of M. Toussaint's methods.

Prevention of Sunstroke.

Though somewhat out of season, we think it worth while to enter for preservation the means of prevention of sunstroke recommended by an English surgeon. He says:—

For seven years of residence in Central China, upon the banks of the Yang-tze-kiang, which annually overflows its banks, I found nothing so protective against sunstroke as ten grains of sulphate of quinine suspended in a wineglassful of sherry, and taken before going out at midday, when required to brave the sun-heat, which is oftener above than below Calcutta temperature. I have tried this plan in so many cases that I feel certain that quinine is as prophylactic against sunstroke as against malarial fever. It was while endeavoring to neutralize the miasma which causes the latter that I noticed how completely I felt braced against the effects of the sun-heat. I should be inclined to dissolve the quinine in hydrobromic acid instead of the sherry.

Hydrobromate of Iron in Chorea.

A correspondent of the *Lancet* gives the following case:

[illegible], an anæmic badly nourished girl, aged fourteen, was frightened by a dog, and almost immediately afterward developed choreiform movements. At the time of my visit, two days after the onset, the child's contortions were painful to witness; her sleep was disturbed, and it was with difficulty she could convey her food to her mouth. The heart sounds were normal, and there was no history of previous cardiac or rheumatic affections. After attending to her digestive organs, I prescribed syrup of hydrobromate of iron in twenty minim doses. The effect was very marked. The sedative action was speedily apparent, as the convulsive movements became gradually less severe, and the control of the muscles more readily recovered; whilst at the same time the anæmia was yielding to the accompanying iron. The continued use of the drug for about twenty days completely removed the affection.

Iodoform in the Vulvitis of Children.

Prof. Parrot applies iodoform by means of a badger's-hair pencil at whatever stage the apthæ may be in, covering the parts affected with a thick layer of iodoform without previous cleansing, and then applying a little charpie. This dressing is repeated every twenty-four hours, until amendment takes place, which it usually does very rapidly. Even after the first application it is rare not to find a considerable improvement. The ulcerated parts look as clean as if they had been carefully washed. Their borders sink and their cavities fill up, and when they are not very extensive they are not easily distinguished from the surrounding parts. The changes take place rapidly,

and lead to the speedy disappearance of vulvular or perineal breaches of surface.

Special Reports.

NO. XVIII.—TUBERCULOSIS.

The ravages of tubercular disease are so great and constant that it is a standing opprobrium to medicine that so little check has been made in the mortality from this cause. In nearly every civilized land almost one-fifth of the total deaths are due directly to this form of degeneration. From the very numerous recent studies upon it we make the following abstracts and remarks:—

NATURE OF TUBERCLE.

The Lænnec Prize this year was awarded to Dr. Graucher, for his studies on tubercle. He claims to have demonstrated the identity of the tubercle granulation and the product of the cheesy pneumonia, the latter being composed of large fused tubercles of the condition of meriting the name of tuberculous pneumonia.

The definition of Virchow that the tubercle "is a feeble and miserable neoplasm, incapable of organization," he teaches, should be replaced by this: "tubercle is a fibrocaseous neoplasm of nodular form, characteristic of a disease known as tuberculosis." This definition implies that the author thinks that the ultimate tendencies of the mature tubercle are to a unity of form and results. The earlier forms, indeed, differ and are characteristic of distinct phases of disease. Hence we have the principal clinical forms of phthisis and anatomical varieties of tubercle proper to each. The tuberculous pneumonia, the common phthisis, the granular phthisis, are described by him, each with its particular tubercle endowed with its peculiar characteristics and pursuing a somewhat special evolution, but claiming place in the grand family of tuberculous products by reason of its type of structure, by its origin, by its tendencies, and finally by its transformations.

THE MICROCOCCI OF TUBERCULOSIS.

Certain investigators have thought they had discovered the active agent in tuberculosis to be a micrococcal organism. Their experiments have been repeated by Dr. Deutschmann. The results which he has obtained do not confirm this view. For instance, some liquid from the anterior chamber of a child suffering from tubercles of the iris was injected into the eye of a rabbit, but without result, although it was found to contain numerous mobile micrococci. These results, Deutschmann concludes, can only be explained on three hypotheses:—

1. That micrococci have nothing to do with the tubercular infection, or with the tuberculous virus..

2. The micrococci serve only as the vehicles of the tubercular infection when they can germinate in a suitable soil, such as is furnished by the lower layer of the tubercular pus.

3. The specific organisms were placed in such unfavorable conditions that they had no pathogenetic action. It is conceivable, for instance, that the micro-organisms were so rapidly absorbed from the anterior chamber, and so rapidly rendered harmless in the blood, that they had no effect, whereas the slower absorption of the lower pus layer gave them time to multiply in it.

THE INFECTIOUS NATURE OF TUBERCLE.

In a quite recent article in *Virchow's Archiv* the distinguished Prof. Rindfleisch expresses himself in the most positive manner in favor of the infectious character of tuberculosis. He states that he considers it demonstrated by the repeated instances in which the disease in the lower animals has followed on their vaccination with tuberculous matter. It is true that the human race is much less liable to contract the disease in this way, but this he attributes to their having acquired a degree of tolerance to the poison, just as they have to leprosy, and in a less degree to syphilis. Phthisis, he believes, is in fact a more contagious disease than syphilis, only we are more generally unused to its prevalence. Tuberculous inflammation he describes as a definite histological process, which the inflammatory action takes on under the specific tuberculous poisons. He divides it into four forms:—

1. Disseminated miliary tuberculosis.

2. Localized miliary tuberculosis, where a single organ is attacked.

3. Tuberculous phthisis, where a single part of an organ is attacked.

4. Chronic caseous and scrofulous inflammations.

The last mentioned are, almost without exception, connected with tuberculosis of the lymphatic glands.

In the same journal (vol. 82) Dr. Tappeiner gives some further experiments on dogs, to confirm his previous observations on the infective properties of phthisical sputa when inhaled, and to ascertain whether scrofulous pus, or ordinary bronchitis sputum, had the same effect. Four dogs were placed under similar conditions, but two were made to inhale diluted phthisical, and two diluted scrofulous, pus. They were all killed

and their organs examined. Those of the latter two were quite normal, while the lungs and spleen of the former two were studded with miliary tubercles, which were examined and described by Dr. FRIEDLANDER. Further experiments proved that the duration of the incubation of tubercle in dogs is between nineteen and twenty-three days. Bronchitis sputa were innocuous.

The experiments of Dr. MARTIN, of Paris, published last winter (*Gazette Medicale*, January, 1881), appear to show conclusively that, although it is true that indifferent substances may give rise to tubercular eruptions, identical in their histological characters with genuine tuberculosis, yet the tubercle of tuberculosis possessed the property of infection, whereas the pseudo tubercle did not. Moreover, the true tubercle became more virulent with every repetition of inoculation on a fresh subject, while the pseudo-tubercle never produced more than local lesions, which did not extend to the neighboring vessels and lymphatic glands; while even this local infective power died out, when successive inoculations were made at the third or fourth in the series.

The transmission of tubercle from the bovine species to man has recently been carefully studied in a work by Dr. CHARLES CREIGHTON, entitled *Bovine Tuberculosis in Man* (London, MacMillan & Co.) The main question which the book seeks to answer is this: Since bovine tuberculosis can be communicated to other animals, has it ever been communicated to man? To this question Dr. CREIGHTON gives unhesitatingly an affirmative answer, basing his conclusions entirely on morphological resemblances. To justify such a conclusion we have, however, a right to ask, not only that resemblances between bovine tuberculosis and certain cases of tuberculosis in man should be shown, but also that some well-marked points of difference should be pointed out between these presumed cases of bovine tuberculosis in man and ordinary human tuberculosis.

The contagion of tubercle is in the *blood* of the phthisical. This has been conclusively demonstrated by Dr. P. BAUMGARTEN, Prosector in Königsberg, in a very scientific series of experiments reported in the *Centralblatt für Med. Wis.*, No. 15, 1881. They also, he claims, distinctly contradict the theory that tuberculous poisoning results from the products of inflammation, or that in any way inflammation is a necessary forerunner of tuberculosis.

THE PNEUMOKONIOSES.

This is the general term applied to those forms of lung infiltration known as "miner's" or "mason's" consumption. They have been recently studied by Dr. WM. ROBERT SMITH (London *Medical Times and Gazette*, May 28th, 1881).

Pneumokonioses is a general term applied to—1, Anthracosis, or coal miner's lung; 2, Silecosis, or stone mason's lung; 3, Siderosis, or steel or brass finisher's lung. In anthracosis the lung is large, voluminous, and increased in weight; the pleura has a universal bluish black color, while general pigmentation and nodules of pigment are likewise found in the lung. If the pigment is only present in small quantities, it is seen running in lines between the lobules; on section the nodules are found to be very distinct, being about the size of a millet-seed. They are hard and intensely black, and are universally distributed throughout the organ; in some places they look like little masses of charcoal. Upon squeezing the organ a blackish fluid exudes, which stains the hands. In severe cases the lung breaks down and forms a gangrenous-like cavity, which differs from ordinary cavities in not being rounded—it is more like a gangrene or slough.

Silecosis is caused by the inhalation of small sand, and it can be at once detected by feeling the lung, which is found to be nodulated. On making a section of the organ, the nodules are seen to be very abundantly distributed through its substance; the organ feels very fibrous, and in some cases actually gritty; the surrounding lung-tissue is in a state of advanced cirrhosis. Besides these changes, bronchiectatic cavities are found, which are regular in shape (usually pyriform), having the broad end directed towards the pleura; they have a distinct glistening lining membrane, which is the elastic basement membrane of the bronchi. With the low magnifying power a large quantity of fibrous tissue is seen, and in this, of a grayish color, the nodules are found. Some amount of pigment is present, but not more than is normally found.

TUBERCULAR PERICARDITIS.

This is a rare affection, an instance of which is described in *Jour. de Med. de Bordeaux*, April, by Dr. VAILLARD.

A girl of 19 died of tubercular meningitis, with extensive enlargement and caseation of the lymphatic glands. The parietal and visceral layers of the pericardium were connected by soft adhesions, and each was covered by false membrane; the visceral layer was studded with granulations and small nodules of caseous tubercle. At a distance from these nodules the microscopical examination showed the proper tissue of the membrane to be somewhat thickened and continuous with a new membrane on the surface, which was almost perfectly organized. Sections through the yellow tubercles showed, even in the thickness of the visceral layer, a small oblong caseous mass, permeated by the remains of tracts of fibrous tissue in process of destruction. No giant-cells were seen in it. Around this caseous centre was a layer of embryonal cells, most marked in the deep layer of the serous membrane. Over the nodule extended the false membrane already described. The subjacent muscular fibres of the heart were fattily degenerated.

Sometimes the inflammatory development at the heart is the first local manifestation of tuberculosis; and for that reason these cases, though rare, are not to be overlooked.

TUBERCULOSIS OF THE LARYNX.

"Laryngeal phthisis," as a separate form of the disease, is doubted by some. A case of primary tuberculosis of the larynx is, however, carefully and fully described by Dr. J. SOLIS COHEN, in the *Archives of Laryngology*, April, 1881.

At the *post-mortem* examination, tuberculous deposits and small cavities were found in the left lung. A few caseous glands were observed in the cervical region at the left side. The ulceration of the glosso-epiglottic sinuses was extensive, and had continued into the base of the tongue, with a partial loss of substance on the right side. The tonsils, vocal cords, and the whole of the subglottic mucous membrane of the larynx were intact. The microscope revealed the submucous connective tissue largely infiltrated with a small-celled product, which showed in places a tendency to the formation of depôts with cheesy centres. There was no history of predisposition to tubercular disease, and the exciting cause was probably exposure to intense cold.

A study of the histology of this disease, by Dr. PH. SHECH, of Munich, is given in Schmidt's *Jahrbuch*, No. 1, 1881. He finds that the affection of the mucous surface is only the local development of true tubercle. In regard to prognosis and therapeutics, he is not hopeful. He usually begins for a few weeks with iodide of potash, in the hope that syphilis is at the bottom of the trouble. At the same time, or later, he advises disinfecting insufflations of boracic acid, to which, if there is difficulty in swallowing, a little morphia may be added. The local treatment with nitrate of silver he wholly condemns.

Dr. MAURICE SCHMIDT, of Frankfort on the-Main, claims, in this disease, to have had good results from a form of inhalation. He places a vessel containing a pint of boiling water over a spirit lamp, and pours in it ten drops of the following:

℞. Balsami peruviani, ʒiv.
Alcoholis, ʒij. M.

The patient inhales the vapor through a funnel of paper, folded in a conical form, about a yard in length. These inhalations should be repeated three or four times a day, and continued for months. In addition to this he sacrifices the superior and posterior surfaces of the larynx (*Annales des Mal. de l'Oreille et du Larynx. Mars*, 1881).

TUBERCULOSIS OF THE NASO-PHARYNX AND EAR.

Basing his statistics on the autopsies of fifty phthisical patients, Dr. E. FRANKEL (*Zeitschrift für Ohrenheilkunde*, x, 1881) finds that twenty-nine of them presented tubercular changes in the ear or naso-pharynx. In most cases these were tubercular ulcerations or inflammations in other cysts or swellings. The investigation is instructive, as showing the profound impregnation of the system with the tubercular poison.

TUBERCULOSIS OF THE GENITO-URINARY ORGANS.

A case of this is recorded by Dr. G. FENNE in the *Nord. Med. Arkiv* (London *Medical Record*):—

A girl, aged eighteen, had suffered for some months from pains in the region of the bladder and urethra, with frequent desire to pass urine. She had generally been healthy, but now and then suffered from suppression of the menses. A short time before her illness she had coitus; there were no important symptoms of urethritis. On admission to hospital she seemed sound and healthy. The above-mentioned symptoms continued. There was tenderness on palpation over the symphysis pubis. The urine was of a light yellow color, turbid, with a whitish, slimy, finely divided sediment; it was alkaline, of specific gravity 1.015, and contained albumen; about the normal quantities of chlorides and phosphates were present. Microscopic examination showed numerous round cells and some red blood corpuscles, with flattened epithelium. The symptoms were unchanged by treatment. She became affected with rigors, headache, nausea, vomiting and hiccough. The tongue had a white deposit. The alvine evacuations were generally normal. She had pain in the middle of the hypogastrium. On the last day of her life she had several attacks of painful micturition, passing only about a spoonful of fluid blood each time. At the necropsy the papillæ and pyramids of the kidneys were found to be the seat of cheesy infiltration; tubercles were scattered through the pelves and the whole substance of the kidneys. The entire mucous membrane of the bladder was the seat of tuberculous ulceration. The urinary organs alone were affected. The starting point of the disease was probably the bladder, as this organ was most extensively diseased.

Connection with a tuberculous individual is suggested as having been the cause of the disease. Were this the case, it would have many important bearings.

(*To be continued.*)

NEWS AND MISCELLANY.

Novel Medical Electrical Apparatus.

A Paris correspondent describes the medical apparatus in the late Electrical Exhibition in that city. The best show is by the French exhibitors. Messrs. Brewer Brothers exhibit a galvanic battery constructed by them for Dr. Onimus, and which is not sufficiently known. Each element consists of an external glass cell, which receives in its upper half a zinc cylinder. This is con-

nected by a copper wire with a disk of the same metal lying at the bottom of the next cell. Inside the cylinder, and resting upon the disk, is a glass tube closed below by a porous gun-wad. To set the battery in action the inner tubes are partially filled with coarsely-powdered sulphate of copper, and water poured into them, and into the outer cells to the upper margins of the cylinders. A modification of this element has been designed by Dr. Senre. Each cell is a U-shaped tube, containing a plug of sponge in the bend. On one side of the sponge is a stratum of sand, and above this sulphate of copper. The other arm of the tube is empty. The metallic portion of the element is formed by a copper coil, dipping into the charged half, and connected with a zinc plate in the empty arm of the adjacent cell. As in the battery of Dr. Onimus, the addition of water puts the element in action. Another good galvanic apparatus is shown by M. Trouvé, but, besides its higher price, it has the disadvantage of requiring a skilled workman to re-charge it when once run down. M. Trouvé also exhibits his polyscope, an ingenious application of Planté's secondary cell to medical exploration. Practically the polyscope is most useful as a companion to the vaginal speculum, but it may be employed for the illumination of any other part. A modification in the arrangement of the platinum wire, which in the polyscope is the source of light, transforms the apparatus into a delicate galvano-thermic cautery suitable for operations in the auditory meatus, about the eyelids, or in any other region where a filiform instrument with the minimum of radiation might be required. In an adjoining room the Assistance Publique display all the electro-therapeutic resources of the Salpétrière. First there is an imposing cabinet, covered with wires, studded with screw heads, fitted with the most elaborate means of determining current-strength and capable of furnishing any kind of dynamic electricity at a moment's notice. Close at hand is a powerful static machine, a combination of the Carré and Holtz models, designed by M. Vigoureux. This apparatus is worked by a gas motor, and can evolve electricity enough for the treatment of six patients at the same time. Dr. Boudet de Paris shows a number of appliances for physiological and clinical research. A cardiophone, with experimental demonstrations on the batrachia twice a week; a sphygmophone and a myophone; an electric diapason, for the treatment of pain by mechanical vibrations; and a coil set in a wooden frame, and arranged to encircle the head, for the induction of the nervous centres. There are many other electro-medical exhibits both in the French and foreign sections. Perhaps the chief characteristics of the medical department are the number and variety of frictional machines, from which it may be gathered that an attempt is being made to restore Franklinism, partially at any rate, to its former favor.

Epidemics.

Recent Russian journals report the reappearance of diphtheria, after a slight cessation of its ravages, in an epidemic form in Southern Russia, and particularly in the governments of Poltava and Pritovki. In the previous extensive and fatal prevalence of the disease in this portion of the Russian Empire the children of the necessitous classes were mainly attacked, but in the present prevalence the children of the well to do classes do not escape.

Intelligence is forwarded from Alexandria that cholera has broken out at Aden, and that thirty cases out of thirty-seven have proved fatal. The *National Zeitung*, referring to the recent outbreak of cholera in Asia, urges the appointment of an international sanitary commission. The Spanish Government has taken very stringent measures to prevent the progagation of cholera. The mail-boats which run between Spain and the Philippine Islands have been forbidden to touch at Aden either on the outward or homeward voyage. Cholera is also very severe in Lahore and elsewhere in India. It is alleged that the mortality is entirely confined to Mussulmen, and is due to Ramadan, the Mahomedan month of fasting recently passed. During this month the men work all day without food, and eat a heavy meal at night.

The Adaptable Porous Felt Splint.

Our readers will probably have noticed the advertisement of the Ahl Adaptable Porous Felt Splint Co., in our advertising pages. If they have not, we would call their especial attention to it. We have known and used this splint for many years, and pronounce it, emphatically, not only the best splint in the market, but the only manufactured splint which a surgeon ought to use. Any one who has once tried a set of them and learned their manifold advantages will not practice without them. They are, indeed, especially in their present improved form, as near the perfection of a splint as we can imagine. In years past we have published various articles upon them, and a longer experience more than confirms all the good that has been said of them.

We strongly advise our readers to apply to the company for a descriptive illustrated pamphlet, which is sent on application, and which will inform them of the details about these, in our opinion, quite unequaled surgical splints.

Lectures on Skin Diseases.

Dr. Bulkley will give a fifth course of lectures on "Diseases of the Skin," in the Pathological Amphitheatre of the New York Hospital, 7 West Fifteenth street, Wednesday afternoons, from 2½ to 3½ o'clock, commencing Wednesday, October 12, 1881. The lectures will be didactic and clinical in character, going over the entire subject of diseases of the skin (including syphilis), and will be freely illustrated by colored plates, photographs, life-sized models, the blackboard, and abundant clinical material. The pathology, differential diagnosis, and treatment of diseases of the skin will be especially considered. The course will consist of twenty-four lectures, and will be free to practitioners of medicine and medical students.

Items.

—An outburst of vaccinal syphilis is reported from Algiers. Fifty-eight recruits, belonging to the 4th Regiment of Zouaves, are said to have acquired the disease in this manner on the 30th of last December.

—Dr. James Luke, F.R.S., died recently in England, at the age of eighty-two. He was twice President of the Royal College of Surgeons, studied under Abernethy and Astley Cooper, and placed the world under notable obligations to him by the special attention he devoted to hernia.

—It is reported that a terrible plague has appeared near Waldron, Platte county, Missouri. Within five days eleven persons died, and none of those now sick show signs of recovery. The bodies of the sufferers are covered with black eruptions, and after death "the flesh falls from the bones, so that the bodies cannot be lifted into coffins without falling to pieces."

—A sample of water from the Sacred Well of Mecca has been analyzed and found to be polluted by sewage to an extraordinary degree of disease-breeding filthiness. In fact, Professor Frankland, who made the analysis, declares that it is nothing less than bottled cholera, and, as this water is in great demand throughout Mohammedan countries, it is manifest that it is likely to be an active agent in the dissemination of disease.

—The *Public Ledger* of this city pertinently says: "The world is getting on pretty near the close of the nineteenth century, and yet it appears to be necessary for skilled physicians and sanitarians to make formal argument before a committee of our City Councils to convince Councils that vaccination is a safeguard against the fatal ravages of small-pox! A hundred years of accumulated experience seems to have gone for nothing."

—At the close of the seventeenth century it was estimated that 3000 persons in every million living died annually of the small-pox. Macaulay's description of the ravages of the disease is thus: "The small-pox was always present, filling the churchyards with corpses, leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the betrothed maiden objects of horror to the lover."

—Canon Rawstorne says, in a late sermon, "It is patent to everybody that those professions which are doing a real work tolerate but little ceremonial. There was a time when the doctor of medicine had as many paraphernalia as a divine; and had a regular routine with all cases, like that ridiculed by Molière and Le Sage, curing, or perhaps killing, but always acting *selon les règles, secundum artem*. All that is quite gone. A doctor who tried to envelop himself in ceremony would be set down at once as a charlatan; as he would no doubt be. All medical subjects are submitted to the freest investigation; everything is reduced to bare scientific truth, and mere reality."

OBITUARY NOTICES.

DR. JOHN BOWEN BRINTON.

Dr. John Bowen Brinton died at his residence in West Chester, Pa., October 13th, after a lingering illness of about a year. He was about 77 years of age. Dr. Brinton was the son of Caleb Brinton, of East Bradford, Chester Co., Pa., and was born on the Brandywine in 1804. He was descended, through his father, from William Brinton, the Elder, who settled in 1684, in Thornbury Township, Delaware County. He studied medicine under Dr. George McClellan, of Philadelphia, whose wife was Dr. Brinton's cousin and a daughter of the late John H. Brinton, Esq., of Philadelphia. He graduated at the Jefferson Medical College of Philadelphia, in 1825, after which he passed a year in the Philadelphia Hospital. In 1826 he came to West Chester, and soon after married Miss Caroline Gemmill, whose father was the principal of the Chester County Academy, who died leaving one child, a daughter. The Doctor married a second wife, Miss Ellen M. Irwin, of Lewistown. Three sons and three daughters were the issue of this marriage, the eldest, Dr. William B. Brinton, being his father's successor in practice. The elder Dr. Brinton was devoted to his profession, and especially to surgery, in which branch he stood at the summit of the profession in Chester County. He was always regarded as a most conscientious practitioner, discharging his duties to his patients with unwearying fidelity.

QUERIES AND REPLIES.

Hygienist. You will find dietaries in Park's *Hygiene*, Hannah's *Hygiene*, and similar works. Two pounds of food a day is a rough average for a healthy man.

Dr. J. P. K., of Ind. "Does the amount of moisture in the atmosphere facilitate the development of spores?"

Ans. Under certain conditions of temperature it does, but not as a constant rule.

Dr. T. F., of N. Y. You will find an article on the use of cold water injections in jaundice in the MEDICAL AND SURGICAL REPORTER, March 2d, 1878, p. 177.

Dr. Miramba. The National Medical Library in Washington aims to contain a complete set of all the medical periodicals published in the United States, and it is, we believe, the only library that does pretend to.

Mr. E. S. We prefer not to express an opinion on your case. Better consult some respectable physician, and when you do so, tell him *the truth*.

MARRIAGES.

SAVAGE—JONES.—In Boonsville, Miss., Oct. 4th, by the Rev G M. Savage, Dr. G. C. Savage and Miss Lessie Jones.

JOLINE—TURNBULL.—On Thursday, October 13, 1881, at St. Luke's Church, Philadelphia, by Rev. C. George Currie, D. D., John Forsyth Joline and Jennie Laurence, daughter of Laurence Turnbull, M.D.

DEATHS.

HALL.—In Oak Grove, Tarrant Co., Texas, Oct. 31, Willie Hall, aged 7 months and eight days, infant son of Dr. E. T. and M. E. Hall.

HARRY.—At Sunny Side, Chester Co., Pa., on August 30, 1881, Dr. Samuel H. Harry, aged 72 years, 4 months and 14 days.

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Original Department.

Lecture.

HEART SOUNDS IN DISEASE.

BY HUGO ENGEL, A.M., M.D.,

Professor of the Principles and Practice of Medicine and of Clinical Medicine, in the Medico-Chirurgical College of Phila.

Gentlemen:—I shall show you some cases to-day which will give me the opportunity to illustrate on them some points that will be of great assistance to you in the diagnosis and study of chronic heart disease. If you can keep in your memory what I shall now explain to you, you will in future find less difficulty in recognizing these affections.

First, a few words about the causes of heart lesions. The latter are either inborn, being hereditary in a family, develop later in the individual without any other apparent cause, or they are acquired in consequence of a violent force striking the region of the heart, or appear after very fatiguing marches; both causes producing occasionally endo- and pericarditis, and these, as their sequelæ, chronic heart lesions. Or, lastly, these affections show themselves first as complications in certain diseases and cachexias; as in acute articular rheumatism, morbus Brightii, syphilis, gout, etc. As regards the causes of functional heart complaints, they are innumerable. Dyspepsia is, perhaps, the most frequent; but uterine affections, certain occupations, neuroses, the use of tobacco, and any influences which make the blood poorer in red corpuscles and produce general debility, may occasion a disturbance of the functions of the heart.

Remember, then, that heart diseases may be divided into functional and organic. We call an affection of the heart a functional one if the function of the organ is disturbed but no anatomical alteration of the latter exists. There may be a great deal of palpitation, at times embarrassed respiration and severe pain in the region of the heart, but the physical exploration reveals no morbid change. The organic heart diseases are those where any part of the organ has undergone an anatomical alteration. Here the so-called heart-symptoms are less prominent; pain and palpitation are, as a rule, less complained of; we have frequently greater and more constant dyspnœa, but by far the most symptoms that accompany organic lesions do not draw the patient's attention to the heart, but refer to the head (giddiness, headache), the stomach (dyspeptic symptoms, due to congestion of liver and stomach), the nervous system (irritability, feeling of great anxiety, tremor), and to the circulation (venous stasis, dropsy, etc.). It is, therefore, by physical examination only that we can recognize organic diseases of the heart.

And here, gentlemen, let me remind you that you must make yourselves, at first, thoroughly acquainted with the normal area of percussion dullness and the normal sounds of a healthy heart before you begin to study its lesions. Percuss so often a healthy heart, and listen so frequently to its sounds, till you know both. You define the heart by percussion best in the following way: Percuss first downward from the middle of the left clavicle, till you reach a dull sound, which will be, in a normal heart, at the lower border of the fourth cartilage. Then you percuss on the right side on a level with the fifth rib, beginning, say, at the nipple and go across the sternum, till you again elicit a duller sound

with a feeling of resistance to the finger. This will be at or near the left edge of the sternum. Having determined these two points, you feel for the impulse in the fifth interspace (between the fifth and sixth cartilage and inside of and about two inches below the nipple), on the left side of the chest, and connect the three points by lines, resembling about the form of the heart (size of closed fist), and you have the normal area of percussion dullness. This answers all practical purposes, as it is very difficult to define the lower border of the heart.

We divide all chronic organic lesions of the heart (omitting here the affections of its membranes and the rarer heart diseases) into diseases of the muscles of the heart and into those of its valves. The first we recognize by percussion mainly, and the second by auscultation. The most important and frequent diseases of the muscular part of the organ are:—

a. Hypertrophy.
b. Dilatation.
c. Dilated Hypertrophy.
d. Fatty heart.

A heart is *hypertrophied* (*i. e.*, the muscular wall of the left ventricle is thickened) if the dullness extends further to the left than normal, if the heart-sounds, especially the first, are sharp and accentuated, the impulse is heaving and diffused over a larger space than normal, and the pulse at the wrist is strong and full. We generally find, besides enlargement of the liver (safety valve), strong pulsation of the carotids, a florid face, headache, vertigo, dyspeptic symptoms, palpitation and dyspnœa on exertion.

A heart is *dilated* (*i. e.*, its muscular walls, especially those of the right ventricle, are in a state of granular degeneration, thinner and stretched, so that the cavities, and here again mostly the one of the right ventricle, are dilated), if the dullness extends on the right side of the sternum, the heart-sounds, especially the first, are very weak, the impulse is hardly felt nor seen, and the pulse at the wrist is small and weak. We have, besides, symptoms of venous stasis; the liver is enlarged, the face often blue or pale, with blue lips, and we find a tendency to fainting, giddiness, dyspnœa, dyspeptic symptoms, passive congestion of lungs, and dropsy.

A heart is in the state of *dilated hypertrophy* (*i. e.*, its muscular walls are thicker and its cavities dilated), if the dullness extends further than normal on both sides, if the sounds are accentuated, the impulse is stronger and diffused, and the pulse at the wrist is weak. The accompanying symptoms will depend upon the fact if the hypertrophy or the dilatation is predominating, and upon the underlying disease, as morbus Brightii, etc.

A *fatty* heart (*i. e.*, when its muscular fibres have undergone fatty degeneration), you recog nize, gentlemen, by the normal or even diminished area of dullness, by the great weakness of the heart-sound, the first being frequently not heard, and by the very weak impulse and pulse at the wrist. Then you have degeneration of the coats of the vessels and evidence of fatty degeneration somewhere else, as in liver and kidney.

As regards *valvular* lesions, now, you must, gentlemen, first impress upon your memory the places at which we hear best the play of each valve. They are as follows: A little above and inside of the left nipple the *mitral* valve; just above the ensiform cartilage, over the sternum, the *tricuspid* valve; at the left border of the sternum, where to the latter the cartilage of the second rib is attached, and at the lower edge of the rib, the semilunar valves of the *pulmonary artery*; and over the second interspace, near the right border of the sternum, the *aortic* valve, therefore, between the second and third rib on the right side.

I told you, gentlemen, to make yourselves at first thoroughly acquainted with the two normal sounds heard at each valve. I will add one point: the sound which takes place synchronously with the pulse at the wrist is the first sound of the heart, mainly produced by the contraction of the ventricles, while the other sound, which you hear between two beats of the pulse, is the second, caused mainly by the closure of the semilunar valves. Whenever, gentlemen, you are in doubt which is the first and which the second sound, feel the pulse at the wrist while auscultating the heart.

The first question to be answered now is: How do we recognize the existence of a valvular lesion? By a murmur, *i. e.*, by an abnormal sound taking the place of one or both normal sounds of the heart. Though there are all kinds of murmurs, if you once have listened carefully and heard distinctly an organic murmur, as you will have opportunity here to-day, you will always recognize it again. But, suppose you have detected a murmur, is this definite proof of the existence of a valvular lesion? No, gentlemen, there are also functional murmurs. For practical purposes you only need to remember two such, the anæmic blood-murmur and the murmur of an excited, overacting heart. If a very anæmic person comes to you, and you listen over the base of the heart, you will find there,

and only there, a soft murmur, which will disappear under large doses of iron. If a strong, healthy individual appears the first time before you for examination, his heart may be acting, perhaps, very excitedly, and then you may hear over the left ventricle a murmur, which will disappear if you permit the person to rest for about five minutes in the recumbent position, or if you quiet the heart's action by aconite. From this you can draw the conclusion yourselves, gentlemen, that a functional murmur is not constant, while an organic murmur, as a rule, if once there will be there forever; at least by no agency of yours can it ever be removed, except, perhaps, if due to syphilis. Besides, an organic murmur is harsh and loud, often musical or rasping; a functional is soft.

Having established to your satisfaction the existence of an organic murmur, therefore, of a valvular lesion, what step do you take next? You have to find out which valve produced the murmur. And here, remember this: The valve over which you hear the murmur the loudest is the affected one; the place where the murmur is most intense divides, therefore, the seat of the lesion. You may find two points of greatest intensity of the murmur. In that case two valves are diseased. After having in this way determined which valve is affected, you have to decide what kind of lesion does exist. For practical purposes we recognize two separate affections of the valves of the heart. A valve may have become torn, or a part of it formed adhesions, so that the valve cannot close tightly, and does not shut sufficiently to allow the blood to flow back, to regurgitate. In such a case we speak of insufficiency, or more generally of *regurgitation*, of that valve. If a valve has become narrowed by calcareous or other deposits, or by any inflammatory processes, then we have narrowing, or as it is called technically, *stenosis* of a valve. To enable you now to say if you have regurgitation or stenosis of that valve, of which you have detected that it is the seat of a murmur, I give you the following rule, which holds good for all practical purposes: A murmur which you hear strongest at one of the two lower valves (mitral and tricuspid), instead of the first sound, denotes regurgitation of that valve; if it replaces the second sound at one of these valves you have stenosis of that valve, and exactly the opposite is the case with the two upper valves (the semilunar valves of the aorta and pulmonary artery). Here a murmur replacing the first sound signifies stenosis, and one taking the place of the second sound denotes regurgitation.

You will admit, gentlemen, that this is very easy, and if you impress this rule fully upon your memory, you will always be able, to make a diagnosis of a valvular lesion, and be prepared to study the exceptions. You establish, therefore, first the existence of an organic murmur, then find out its seat of greatest intensity; to know which valve is affected, and at last you decide; if the murmur replaces the first or the second sound, to know if you have stenosis or regurgitation, and your diagnosis is made. I may add, that a murmur which you hear instead of the first sound is often called a systolic murmur, and the one taking the place of the second sound, a diastolic or presystolic murmur.

A few general remarks only about the treatment: In cases of uncomplicated hypertrophy of the heart try to remove cause, as certain occupations, etc., pay attention to all the secretions of the body, keep the patient, if possible, a long time in the recumbent position, allowing him only a diet sufficient to sustain life, and give him internally one minim of the tincture radicis aconiti, three times daily, until you have reduced the form of the impulse to the normal. In cases of dilatation, the great tonic of the heart, digitalis, is indicated; otherwise our treatment must be governed by the concomitant symptoms. As regards dilated hypertrophy, I can give you no general rule; you have to treat here the underlying disease, and the accompanying circumstances must teach you if quinine, belladonna and digitalis (remedies which, combined, are frequently employed to regulate the heart's action) are to be given, or if aconite, besides attention to the secretions, is indicated. All will depend upon the fact if the hypertrophy or the dilatation is predominating. For a fatty heart, strychnine and iron are the best remedies.

Do valvular lesions of themselves ever give us any indications for treatment? Only very little, gentlemen; mostly it is only of interest for us as regards diagnosis and prognosis to know what peculiar valvular lesion we have before us. Affections of the aortic valve are apt to terminate abruptly, producing instantaneous death; while lesions of the mitral valve, and still more those of the tricuspid valve, usually wear the patient out by dropsy, and especially the latter by all forms of venous stasis and the greatest possible dilatation. Disease of the pulmonary valves, in almost all cases inborn, gives rise to pulmonary complications, relieved by cupping, etc. We may further say, in general, that digitalis is of benefit mainly in mitral affections, while for aortic lesions the bromides have a good effect.

When mitral lesions are near their fatal termination, and digitalis seems to do no good any more, morphia will often be of great use. But if valvular affections of themselves give us little indication for treatment, what then shall guide us? The accompanying hypertrophy or dilatation, gentlemen. In every affection of a valve one of the ventricles must gradually either become thicker and stronger in its muscular walls (hypertrophy), or its cavity must enlarge by the stretching of the walls (dilatation), or both must take place to a certain extent (dilated hypertrophy), to compensate for the disturbance of circulation, brought about by the valvular defect. For instance: The aortic orifice is narrowed; the left ventricle receives, notwithstanding, the same volume of blood as before the valve was affected, and at the same time the ventricle must push the same volume of blood forward, but now through a narrower opening. What must take place? Its force being increased, its activity greater, the muscle of the left ventricle will follow the law which all muscles obey under similar circumstances: it will enlarge. As long now, gentlemen, as this hypertrophy does not overstep the limit which it has to reach, to be able to carry on the circulation under the altered circumstances just as formerly, the enlargement will be a compensating hypertrophy, and so it is called. And, gentlemen, as long as we have a compensating hypertrophy or dilatation we must leave the heart alone, and give no medicine whatsoever to influence its action; but as soon as either condition oversteps the limits of compensation we may use in the first case aconite, and in the second digitalis, either to reduce or increase the force of the organ. In a valvular lesion the accompanying degree of hypertrophy or dilatation indicates, therefore, the treatment. Certainly, this has reference to the heart alone; the treatment of the underlying disease, as rheumatism, gout, syphilis, or morbus Brightii, etc.. has nothing whatsoever to do with the question before us.

To recapitulate, gentlemen: Having made ourselves thoroughly acquainted with the normal sounds of a healthy and the murmurs of a diseased valve, and with the normal area of percussion dullness, we decide, when examining a patient's heart, first, if we have a functional or organic affection of the heart before us. In functional complaints the size of the heart is normal, and so are its sounds, except in great anæmia, when we hear at the base of the heart a soft murmur, disappearing under large doses of iron, and except under great excitement of the organ, when we perceive a murmur over the left ventricle, which ceases when bringing the patient in the recumbent position, or under the influence of aconite. Suppose we have no functional, but an organic disease of the heart. Then we percuss first, to detect if and on which side the organ is enlarged, note how loud the sounds of the heart are, and observe the strength and area of the impulse, and feel the pulse at the wrist, so that we may diagnosticate hypertrophy, dilatation, dilated hypertrophy, or a fatty heart. This done, we listen for an organic murmur. Having perceived such, we decide its seat of greatest intensity, to know which valve is the affected one; and then we note if the murmur replaces the first or the second sound of the heart, to enable us to say if we have to do with stenosis or regurgitation of the diseased valve or valves, or, may be, with both. The indications for treatment are given by the condition of the muscle of the heart.

I shall now, gentlemen, illustrate to you on the living body what I explained to you.

AORTIC STENOSIS AND MITRAL REGURGITATION.

You see here, gentlemen, a little girl, Emma N——, 6 years old, who seems to be very irritable. Her mother tells us that the child had, two years ago, acute articular rheumatism, and that it complained during this illness a great deal of pain in the chest, and had much difficulty in breathing. Since then the child has never been well; it is very fretful, starts often during sleep, and seems to suffer from pain on the left side of the chest very frequently. Besides, the mother informs us she cannot allow the child to run about with its playmates, as it immediately suffers from shortness of breath, and its heart is beating so strongly that the mother is sometimes afraid that the organ would break through the chest-wall. The hour drawing near its close, I shall to-day only examine the heart of our little patient. Looking at the left side of the chest, the region of the heart seems to be bulging out a little; you observe, further, how heaving and how diffused over several interspaces the impulse is; percussion shows a slight increase of the area of dullness at the base and towards the left side, and the pulse at the wrist is hard and strong. We have, therefore, here, so far—what? "Hypertrophy of the heart." Correct, and we will now listen to the sounds of the organ. I perceive a very loud murmur, which takes the place of the first sound; and auscultating carefully, I find that there are two points of greatest intensity —one near the left nipple, and the other, harsher, different in character from the first, near the junction of the second rib with the right edge of

the sternum. This indicates an affection of what valves? "The mitral and aortic." Perfectly correct: and as I told you that both murmurs replace the first sound, we have what lesions? "Regurgitation of the mitral and stenosis of the aortic valve." Very good. The increase of dullness at the base shows us, I think, enlargement of the left auricle, so that at present one lesion seems to compensate the other, and as, considering the valvular disease, the hypertrophy must be taken for compensating also, we shall only order rest and avoidance of all excitement, regulate the bowels by an occasional dose of castor oil, and apply an emplastrum belladonnæ over the heart, to ease the pain. Should the heart continue to act as excitedly as now, we shall give the child, in addition, half a drop of the tincture of the root of aconite, three times daily.

REGURGITATION OF THE MITRAL VALVE.

Our second case is this little boy, kindly sent to us by a colleague. The boy's name is John B——, and he is nine years old. He looks very pale, and complains of beating in his chest when walking fast, and of general weakness. Looking at the boy's chest, we find the sternum very prominent. We observe further (and very nicely in this case, on account of the thin chest walls), the impulse in the fifth interspace; it is a little stronger than normal. The pulse at the wrist is strong, but not full. Percussing the region of the heart we find a tympanitic sound over the forward-pushed sternum, which shows us that this condition is not due to an enlarged heart, or a tumor, or aneurism, but that the boy has what is called a chicken breast, about the cause of which I shall speak at another time. The area of dullness extends a little further left than normal, and we have evidently some hypertrophy here. Auscultating, I hear a harsh murmur replacing the first sound, and find it loudest and ending with almost a musical sound near the nipple—somewhat to the left of it. We have, therefore, here an affection of the "mitral valve," and what lesion? "Regurgitation." The hypertrophy is here merely compensating, and besides rest and regulation of the diet we shall only prescribe iron to improve the boy's blood.

FUNCTIONAL AFFECTION OF THE HEART.

This lady, Mrs. Jane M., thirty-nine years old, complains of pain in the left side of the chest and frequent palpitation. We learn, besides, that she has a capricious appetite, is constipated, that she feels after eating a sensation of weight in the epigastrium, that she belches often, and that she suffers occasionally from shortness of breath. Her tongue is flabby and indented by the teeth. On percussion we find the area of dullness over the heart to be normal, and, on auscultation, that the same is the case with the sounds of the heart. Only the impulse is a little excited and irregular. What affection of the heart have we here? "A functional disturbance," due to dyspepsia. We shall order the application of an emplastrum belladonnæ over the region of the heart, to remove her pain, put her on a diet of milk and toasted white bread, and give her of the following mixture a dessertspoonful, in half a tumblerful of water, three times daily, one hour before each meal:

℞. Sodii bicarbonatis, ʒ ij
Tincturæ nucis vomicæ, fʒ ij
Tincturæ gentian comp.,
Tincturæ rhei simplic., āā fʒ ij. M.
Sig.—Shake well.

When she comes to our clinic again, in a week from to-day, you will find that her heart symptoms have totally disappeared and her dyspepsia has much improved.

Gentlemen, I thank you that you have listened so patiently, though the hour is over some time ago. I hope you will impress upon your memory what I explained to you to day. In my didactic lectures I shall tell you the exceptions to the rules given above, and describe to you the diseases of the membranes of the heart.

Communications.

THE DIGESTIVE PROCESS IN INFANCY.

BY THOS. S. SOZINSKEY, M.D., PH. D.,
Of Philadelphia.

In a lecture delivered recently in one of our leading medical colleges, many of what seemed to me to be very questionable statements about remarkable physiological and other features of infantile life were made, among which were these: that for three months or so after birth the salivary glands do not perform their function, and that for a similar period the stomach is merely a receptacle for food and not a digestive organ. Such statements as these finding deliverance in such a place, a place where one should expect to hear only the truth, and truth precisely stated, would seem to be confirmatory of the allegation made by the professor, that far too little careful attention is as yet given by physicians to the subject of children in health and disease, a branch of medicine, truly, about which there is much room for increase of knowledge, as well as to which far too little attention is generally given.

The two statements quoted and several related

ones have suggested the remarks which follow. And here, I cannot refrain from saying that not only the points to which I refer, but all others about the nature and management of children should be thoroughly studied by physicians. The subject is obviously deserving enough. Medical men who take a warm interest in all pertaining to the young, cannot fail to be instruments of inestimable value to the race. Statistics of premature mortality and other evidences of degeneracy are very indicative of the pressing need there is for such interest, of the need there is for an improved science and art of child rearing.

The idea that there is an absence of the sali vary secretion in early infancy, is likely familar to all reading physicians. Not so, however, the idea that the infantile stomach is a passive pouch ; this one is doubtless novel to very many. But at any rate, if for no other sake than that of truth, it is to be hoped that the former is not, and that the latter will not become, firmly fixed in any one's mind.

Now, if it be, as every physician must have heard asserted frequently, a fact that in the absence of saliva starchy articles of food cannot be digested, it follows that starchy foods cannot be digested by infants, they being void of that secretion. This is a common belief, and naturally it is regarded as worthy of attention practically by practitioners of consistent ideas. Of course, it would be all wrong to have an element in the diet which cannot in the nature of things be digested. But if the stomach of a child under three months of age is only a passive pouch, what then? Knowing that it cannot digest anything, should we not maintain that it is both illogical and mischievious to put anything into it? Evidently all other as well as amylaceous articles of diet must fail to be digested, if the power of digestion is wanting. One is forced to arrive at this conclusion, unless some article, or articles may enter the system and nourish it without undergoing any digestive change.

In accordance with his declaration that the stomach of an infant is void of digestive power, the professor in question expressed the idea that the natural nourishment in infancy, namely, the mother's milk, does not undergo any digestive process before entering the system. In other words, milk is a food which calls for no digestive change, or perhaps I should say that the milk yielded for the first three months or so after childbirth calls for no digestive change. It enters the system as does water; it requires the preparatory action of neither gastric juice nor anything else.

Common sense alone should lead one to question the truth of all this. I do not believe that there is an absence of saliva during the first three months of life, and I am equally sure that before a child is three months old its stomach is something more than a mere pouch. Consequently, even if I take it as a fact that starch cannot be digested without saliva, I have reason to believe that it is possible for an infant to digest, at any rate in a measure, starchy or other items of diet besides the natural food. Nor can I believe that the milk, during the first three months after childbirth, calls for no digestive change.

If the salivary glands of infants do not secrete any saliva, my observational powers are utterly deceiving. It is apt to even flow freely from the mouth of a properly developed child before the completion of the third month. Saliva is secreted from birth forward, and every one can readily collect it for his own inspection, or for experiment, by placing a piece of sponge in the mouth. It would be somewhat irrational to hold that none of it is formed from the start. An infant is indeed a frail creature, but the laws of nature are not so unwise as to bring the young of the human species into the world with even the mere vegetative or organic functions in a state of utter imperfection. One may safely affirm that all ordinary functions, animal as well as organic, mental as well as physical, are sufficiently developed to begin to act more or less perfectly from the moment a healthy child is born. Each and every one of them grows more perfect by degrees. But years serve merely to make them more perfect. The whole digestive process is essentially similar in infantile life to what it is afterwards. It is in power chiefly that it differs. I take it as a fact that the saliva is very much less profusely secreted immediately after birth than later, and doubtless, too, its capacity to transform starch into sugar is less. In brief it may be said that the digestive power of the stomach, and indeed the whole alimentary tract, is comparatively feeble at first.

Just how profuse the saliva is at any period it is probably impossible to find out, or rather, I should say, the secretive capacity of the salivary glands at any period it is impossible to find out. As the sense of taste develops it doubtless increases greatly. The character of the food used has much to do with the amount formed. The use of solid articles calls forth much of it; for which and other reasons, by the way, it would seem that not the least important end, perhaps the chief end, of it is to soften and lubricate the food. Indeed, Bernard and others maintained that it

served no chemical purpose. At any rate, it is certain that more than a little of the starchy matter consumed is not transformed into sugar before reaching the stomach. The pancreatic and various intestinal secretions have much to do in carrying the process to, or approximately to, the point of completion.

Different features of the salivary secretion in early life have been carefully studied by several competent investigators. Dr. A. Jacobi, of New York, adverts so comprehensively, and at the same time briefly, to the matter, in his excellent contribution on infantile hygiene, in the recently published "Cyclopædia of Hygiene and Pub lic Health," edited by Dr. Buck, and what he says is so deserving of attention that I will give it essentially as stated by him. He remarks that after a number of experiments and statements made by Bidder and Schmidt, Ritter von Rittershain, Jörg and himself (Korowin experimented for the purpose of comparing the effects of the salivary glands with those of the pancreas), he treated starch with infusions of both the pancreas and the parotid glands. He found that the pancreas is capable of transforming starch into sugar at a later time than the parotids. No such effect was exhibited by the pancreatic infusion in the first month, but a noticeable one in the second, and a reasonable one in the third. At the end of the first year the diastastic effect of the pancreas is fully developed. The parotid infusion, however, is effective from the first day of life, particularly in well-developed infants. Small pieces of sponge were introduced into the baby's mouth, and withdrawn after awhile. It took from fifteen to twenty minutes to collect a cubic centimeter of saliva in the mouth of infants of from two to four weeks, the tenfold time of what was required in infants of three months. Now and then the secretion would stop, after having been distinctively active for a little while. Seventeen babies of from one to ten days yielded a diastastic saliva. The number of his qualitative experiments amounted to one hundred and twenty. The diastastic effect of the saliva of an infant of eleven months was as marked as that of his own. He also published the results of a second series of experiments, which were of similar import. The conclusions of another investigator (Zweifel) are the same, but, in addition, are illustrative of certain morbid conditions. The infusion of the submaxillary gland of a young infant yielded no transformation of starch into sugar after an hour's contact. An infusion of the parotid of a baby of seven days proved effective after four minutes; that of an infant of eighteen days, who died of gastro intestinal catarrh, and that of a fœtus of the ninth month after forty-five minutes. No diastasis was produced by the parotids of a prematurely born child dead of diarrhœa and debility, of a fœtus of three months, and of one of four months.

Dr. Jacobi concludes that "age, development, or sickness, with diminished amount of fluid, is of great moment in changing the diastastic effect of the salivary glands."

From what precedes, it would appear that young children are capable of digesting starch to some extent at least. As a matter of fact, it has been given to many in greater or lesser quantity time out of mind. From the statements made, it follows that some of the diastastic element is present from the very start. Dr. Jacobi holds that "from the first days of life starch, in small amounts, can be digested; that in a few months after birth such vegetables as contain starch in moderate but not overwhelming percentage may be used as additional infant food." On this subject Dr. J. Lewis Smith, in his contribution to the recent work, "The Sanitary Care and Treatment of Children and Their Diseases," says: "It seems now established that young infants can digest starch, though not to the extent of those who are older." Let it be borne in mind, however, that the power of different children of the same age to digest starch, or any other article of diet, is far from being equal—a matter of great importance in their dietetic management.

In this connection it is proper to say that the salivary and pancreatic secretions, pure and simple, are not, as Liebig and others have proclaimed, the exclusive sources of material which transforms starch into dextrine and glucose. It has been shown that the mucous membranes of the mouth and other parts of the alimentary tract furnish a ferment which is productive of the change. Indeed there is some reason to believe that the diastastic power of at least the secretion of the salivary glands is not much greater than that of the other secretions of the mouth. As bearing on this, it is worth while to transcribe the following suggestive extract from Dr. Pavy's book, "Digestion and its Disorders:" "Neither the pure secretions from the different salivary glands, nor the admixture of these in the case of the horse and dog, enjoy the power, when fresh, of transforming starch into sugar. It is true, after they have been kept a few days, that they enjoy it, but in this there is nothing especial, the property being one that is common to organic fluids in general in a state of change. The mixed saliva of these animals, however,

that has been derived from the cavity of the mouth is found to possess a transformative power, although of nothing like as strong a nature as that enjoyed by our own."

As regards the digestibility of the mother's milk, I may remark that there can be little doubt but that it is easier of digestion for a few months at the beginning than later, a fact which should not be forgotten in choosing a wet nurse. Except for a limited time at the start it is obviously much thinner at first than afterward. But there is no reason whatever to believe that it undergoes a radical change of character within three months. At any rate, cases are familiar to me, and doubtless to all other physicians, in which cow's milk has been used from birth forward; from which it follows that the infantile stomach can digest other than the fresh milk of the mother.

Now, although it is certain that a child under three months of age can in a measure digest almost any ordinary article of diet, I do not advise any one to insist that it should do so. The mother's milk is the best food, infinitely the best food for it, and the only kind of food which it should get until it has passed its third month, nay, its eighth or ninth month. Soups, preparations of beef, or anything, including even cow's milk, should not be given to an infant, except the mother cannot by an ordinary, or if necessary an extraordinary effort on her part, afford it nourishment, and nourishment, too, which is both good in quality and sufficient in quantity.

In that interesting compendium of ancient medicine, "Paulus Æginæta," it is said, "The child may be brought up upon milk until it is two years old, after which its diet may be changed to food from grain." Hebrew women, we are informed, gave their children breast-nourishment two years, and Mohammedan mothers are enjoined to do so by the Koran. But, although a child under two years should get plenty of milk, it is not at all necessary, or wise, to deny it all this time vegetable food or animal food either, or to confine it to milk of the mother; beyond question milk should be the main item of diet, and not of children under two only, but of those much older also. It is, perhaps, in connection with milk, in order to render it easier of digestion, that any starchy or mealy preparation is chiefly serviceable to very young children. However, it is undoubtedly a fact that the system may, though at great risk of harm, become habituated early to the use of almost any kind of fare; every one must have observed this. Nevertheless, it may be affirmed that, as a rule, starchy articles cannot be digested readily and well, nor can meals of any kind either, until considerably later than the eighth or ninth month, until from twelve to sixteen teeth are present. Any one can easily verify this by experiment. No doubt, some starchy articles are digested better than nitrogenized meals. The adult finds light, starchy articles comparatively easy of digestion, and so does the child. Of course, the question of the amount and kind of nourishment yielded by the one or the other is quite another matter.

Hospital Reports.

UNIVERSITY HOSPITAL.

CLINIC OF JOHN ASHHURST, JR., M.D.,

Professor of Clinical Surgery in the University of Pennsylvania.

(Reported by Charles S. Dolbey.)

Diastasis of the Manubrium.

Case 1.—I shall first bring before you to-day, gentlemen, a case of injury, the diagnosis of which is not perfectly clear. This man being seized with a fit or convulsion while employed upon a trestle-work, fell and struck upon an iron steamer passing below. As you observe, his whole face, and the left side and the front of his chest, are red from excessive contusion. The injury the presence of which I suspected when I first examined the patient was a dislocation or diastasis of the manubrium; but this may prove not to be the case, although there was and still is a decided depression at the upper end of the sternum, together with a sensation as of effused liquid, probably blood. This form of injury is a comparatively rare one, and it is necessary to diagnose between diastasis and fracture.

Diastasis is usually produced by indirect violence, as by a fall upon the back; it may also result from the excessive muscular action accompanying vomiting or labor pains. Fracture of the sternum, on the other hand, is commonly produced by direct violence. You may infer the presence of diastasis and the absence of fracture, when the upper portion of the sternum is found below the rest, for in fracture the lower piece is usually found driven back behind the upper fragment. You should however always suspect the possibility of congenital deformity, and avoid mistaking this for diastasis or fracture. The prognosis is more favorable in diastasis. In fracture you may have serious injury of the thoracic viscera, or, at a later period, abscess in the anterior mediastinal space.

Occasionally there has been found a true joint between the manubrium and gladiolus, and it is from this circumstance that the term dislocation is sometimes used. Commonly, however, there is a simple separation or diastasis. There being no emphysema we would infer that the lung has escaped being torn and that there is no communication with the air passages; and this, with the fact that the lower rises above the upper

fragment, leads me to suspect that, in this case, we have a diastasis of the manubrium. In doubtful cases it is best to treat the patient as if the more severe injury had been received, and if at length it turns out that you have been mistaken, and the character of the injury is not so severe, you have at any rate done no harm. Hence we will treat this case as if certain that the suspected injury was present. We will apply a compress at the juncture of the sternal bones, and hold it in place by means of broad, adhesive strips.

If the deformity is very great in a case of this kind, you may facilitate its reduction by placing a pillow beneath the back, so as to render the front wall of the thorax prominent, and aid in bringing out the depressed portion of the sternum. Use no more violent means than this, however. I do not advise the old method of drawing the depressed bone forward by means of a hook or gimlet.

Deep-seated ecchymosis coming on after six or seven days, and evidently due to leakage from below, would give us evidence of injury to the deep tissues, and would tend to confirm a diagnosis of fracture.

Hydrocele of Spermatic Cord.

Case 2.—Our next patient is a little boy with hydrocele of the cord. This might be mistaken for a hernia or for a retained testicle. The latter case would easily be recognized by the absence of the gland from the scrotum, and we may eliminate the former by invaginating the scrotum with the finger and showing that the inguinal canal is clear. This tumor has the elastic, fluctuating appearance of a fluid, and would possibly show some translucency if examined in a dark room. The lower portion of the vaginal process of the peritoneum constitutes the tunica vaginalis testis, while the upper portion ordinarily becomes closed and forms an investment for the cord; but complete obliteration of this portion does not always occur, a space sometimes remaining open in which fluid accumulates, constituting hydrocele of the cord. By the use of an evaporating lotion of muriate of ammonium, five grains to the ounce, we may often cause this swelling to go away, but in this case it has failed. I will therefore introduce a very delicate trocar—without, however, as you see, obtaining any fluid. This is due probably to its being of a viscid character. Simply puncturing the cavity may possibly effect a cure. There is one circumstance which we must bear in mind, and that is that fatty tumors are sometimes met with on the cord. I do not know of any method of positively diagnosing between hydrocele of the cord and tumor of the cord before operation.

Malignant Sarcocele.

Case 3.—We have next, gentlemen, a man past middle age, having a tumor of the right testicle, extending for some distance up the cord. It is to be distinguished from ordinary hydrocele, first, by its shape, which in hydrocele is pear-like, the long axis corresponding to the long axis of the body, but here the greatest size is at almost right angles to the body; it is also quite hard, and very heavy in proportion to its bulk. A hydrocele of the same size would not be so heavy. Its general appearance, rapid growth, the fact that there has been little pain accompanying it, its weight, the hardness and implication of the cord, together with the age of the patient, all tend to confirm the opinion that it is a tumor of the testicle, probably of a malignant character. To show whether it be a sarcomatous or carcinomatous growth, we must have recourse to the microscope. The mode of distinguishing between these depends upon the fact that in sarcomatous growth we always have an intercellular substance, and cells in immediate relation to this intercellular substance.

In schirrous growth, on the other hand, we have a distinct stroma, which is often confused by students with the intercellular substance of the sarcomata, and in the meshes of this stroma the cells are closely packed together. Sarcoma, especially when it affects the testicle, is fully as malignant as any carcinoma, but a sarcoma situated in bone tissue is not such a rapidly destructive disease as carcinoma in the same position.

The only treatment which offers the slightest hope of benefit in a case of malignant sarcocele is removal of the growth. If we were sure that the disease was limited to the testicle itself, we might remove the gland without the tunica vaginalis, but it is a safe rule, in any case of doubt, to remove the coverings of the gland as well as the gland itself. We first dissect off the scrotum, making a single longitudinal incision, and then carefully trace up the cord until healthy tissue is reached. The cord may be ligated as a whole, or the arteries be taken up separately, or we may divide the structures with the *écraseur*. An advantage to be gained by the use of this latter method is that there is less shock than when the cord is cut with the knife. The operation of castration is always attended with great shock—greater than would be supposed from the apparent magnitude of the operation.

As you see, on removing the growth from the scrotum, I leave, apparently, a very large wound, but this will speedily contract, and the wound will be comparatively small. I have kept the edge of my knife turned toward the gland, so as not to destroy too much of the vascular connection of the scrotum, as it might slough if not left with sufficient blood supply. This operation is much more rapid when the tumor is removed without the tunica vaginalis, but as I have already remarked it is much safer to remove the tunics with the gland when we suspect the growth to be malignant. On getting above the indurated portion we will pass a strong ligature through the cord above the point at which we divide it, leaving a loose loop by which we can control the upper end of the cord, and draw it down at any time to arrest hemorrhage. As soon as the écraseur begins to bind, we proceed slowly, that we may divide the cord without hemorrhage. I find the best plan is to make two or three rapid jerking turns, then wait a while until the tension is somewhat diminished, and again make rapid turns, separating the cord by jerks as it were. Chassaignac, the inventor of the écraseur, admired it so much, that he performed all operations with it, including amputation of the thigh and lithotomy. Gynæcologists often use it in the removal of uterine tumors, employing a wire instead of the chain, but the chain is not so apt to

break as the wire, and makes a more contused wound, in which there is not, I think, so much liability to secondary hemorrhage. I prefer the chain, also, to the galvanic *écraseur*, the use of which is apt to be followed by secondary bleeding. It is almost impossible to get primary union of the scrotum, as it is constantly expanding and contracting and is in this way so much disturbed that it seldom unites by adhesion, but does so by granulation in a much shorter time than you would suppose.

Medical Societies.

THE INTERNATIONAL MEDICAL CONGRESS.

(*Continued from p.* 462.)

Section on Materia Medica and Pharmacology.

An important discussion took place on the introduction of

AN INTERNATIONAL PHARMACOPŒIA.

As the result of an exchange of views, a committee was appointed "to coöperate with a committee appointed by the International Pharmaceutical Congress to prepare a compilation in which the strength of all potent drugs and their preparations is equalized." The following are the names of this committee as far as provisionally chosen: Great Britain, Professors Fraser and Lauder Brunton; France, Professors Dujardin-Beaumetz and Vulpian; Germany, Professors Rossbach and Eulenburg; Austria, Professor Schroff; Russia, Professors Botkin and Dogiel; Holland, Professors Stockvis and Fokker; Switzerland, Professor Prevost; and the United States, Professors Wood and Flint.

Professor Plugge read an interesting paper on the alkaloids known as

ACONITIA.

M. Petit, Mr. Carteighe and the President took part in the discussion that followed upon the subject, and the general consensus appeared to be that, inasmuch as the alkaloids derived from *Aconitum napellus* and from *Aconitum ferox*, respectively, are by no means of equal strength, it is highly desirable that a tincture of the former root should be ordered, and not any preparation of the active principle.

PHYSIOLOGICAL ANTAGONISM.

The discussion on this subject was opened by a paper from Professor Wood, of Philadelphia. All functional activity being the result of molecular movements in living protoplasm, all active remedies must either chemically unite with the protoplasm, or alter the character of these movements. We might expect to find forces antagonistic in their action on the organism, as we find them everywhere in nature. Most substances, indeed, which quicken molecular action at first, end by arresting it. Dr. Wood referred to Professor Prevost's distinction between antidotism and antagonism, a physiological antidote relieving symptoms that cause death, whilst a physiological antagonist acts in direct opposition to some other substance (chloral and strychnia). The treatment of disease by antagonism is as much possible as the antagonistic treatment of poisoning. But inasmuch as the action of a "disease" poison is complex and obscure, we have, as a rule, to fall back on antidotal treatment (*i. e.*, the treatment of symptoms), and wait for the elimination or destruction of the disease poison. Bearing in mind the distinction between antagonism and antidotism, the mixed falsity and truth of *similia similibus curantur* is seen. "Allopathy" is no more true than "homœopathy," but the law of antagonism is of wide applicability in therapeutics, and its range must continually increase.

A paper on

PILOCARPIN

was read by Dr. William Squire (of London), which dealt very fully with the physiological action, and especially with the therapeutical applications, of the new remedy. Dr. Squire prefers to use the muriate of pilocarpin in simple solution, one grain to fifteen minims of water for hypodermic injection, one grain to four ounces of water for internal use, one-third of a grain being the largest and one-fifteenth of a grain the smallest dose required. A full dose should be given at once. The principal use of pilocarpin is in some cases of diphtheria and the different kinds of Bright's disease. Dr. Huchard, of Paris, recommended great caution in the use of pilocarpin in Bright's disease when the heart was threatening to give way. He had observed the greatest benefit from its employment in polyuria, and a certain amount of good in cases of sweating in phthisis. Dr. Jacobi, of New York, said that perspiration without introduction of water into the system being dangerous, it was necessary in Bright's disease to combine the use of pilocarpin with injections of water per rectum. Dr. Jacobi also indicated the class of diphtheritic cases in which pilocarpin was of some value. Professor Quinlan, of Dublin, did not fear so much the action of pilocarpin as a cardiac depressant. Mr. Gerard and Mr. Martindale spoke on the subject of

VIVISECTION.

The following resolution was adopted by the whole Section, with one dissenting voice:—

"The Section resolves that, in their opinion, advancement in the knowledge of the action of medicines, in the present state of science, cannot be obtained without experiments on the lower animals."

ON THE REMEDIES USED TO PROMOTE ABSORPTION OF INFLAMMATORY AND OTHER MORBID PRODUCTS.

Dr. Dujardin-Beaumetz read a paper on this subject. He said that, rightly to estimate the value of therapeutic interference in the circumstances indicated, the changes that normally occurred without it must first be considered. The living cell was the theatre of a continual integration and disintegration, the materials for which were supplied by the blood and lymph. Under irritation, it only underwent visible alterations, often in the direction of inordinate development. After a time, however, this pathological activity usually came to a stop, and the abnormal elements produced might gradually disappear: first, by the removal of corpuscular elements, still

in an early stage of organization, by the lymphatic circulation; secondly, by fatty or granular degeneration of the newly formed elements, and the subsequent absorption of the detritus thus produced; lastly, by fibroid elements taking the place of the embryonic tissue, and choking its further development. Sometimes, in the case of serous and mucous membranes, sero-fibrinous effusions were poured out, and were reabsorbed by the capillaries, either unchanged or after undergoing fatty-granular metamorphosis. Lastly, the influence of the nervous system in controlling tissue metabolism must not be left out of account. Therapeutic interference might, to a certain extent, promote the absorption of these morbid and inflammatory products. Medicines designed to favor it had been termed "resolvent." The old pharmacopœia divided them into "solvent," "deobstruent" and "absorbent" remedies; the first intended to soften the morbid products; the second to facilitate the circulation through the capillary and lymphatic vessels; the third to promote the absorption of the products after they had undergone more or less profound changes. This old classification furnished a very real explanation of the phenomena. To hasten absorption, it was necessary to assist the processes which normally occurred in the diseased tissues; to hasten their return to their embryonic phase, or their fatty-granular degeneration, or the development of the fibroid cicatricial tissue which tended to strangle them. The remedial measures for the promotion of these objects were manifold. Some acted mechanically (compression, massage, etc.); others, of a more active kind, by evulsion (blisters, "solvent" ointments and plasters). Other remedial agents acted still more directly on nutrition, through the nervous or the vasomotor system (the continuous galvanic current, applied to the surface, or by electro-puncture). A destructive action on the morbid products, designed to promote their degeneration and absorption, had been aimed at in other ways (injection of Corsica *papaya* or *papayin* into malignant tumors; toxic injections to destroy the fœtus in extra-uterine pregnancy, etc.). Again, the liquid products of inflammation might sometimes be removed by surgical means (pus, sero-fibrinous effusions, etc.). There remained to be considered those medicaments, in the strict sense of the term, which had a solvent action on inflammatory and other morbid products. First, however, the influence of the general nutrition of the body on the nutrition of such product deserved notice. Both augmentation and diminution of nutritive interchange exerted such an influence. The former might cause morbid products to be absorbed by stimulating the functions of the economy (*e. g.*, removal of strumous and lymphatic deposits by appropriate hygienic measures—country air, nourishing food, regulated exercises; these measures increasing the activity of the capillary and lymphatic circulation). Abstinence and diseases productive of malnutrition might achieve the same end in another fashion (autophagy of muscular and adipose tissue; similar action on tumors chiefly made up of fat). A like method had been proposed with a view to the removal of inflammatory exudations into serous cavities (peritoneum, pleura). Apart from medicines which acted on certain inflammatory exudations (*e. g.*, diuretics and purgatives in pleuritic and peritoneal effusions), and from such as operated by affecting nutrition (*e. g.*, arsenic), there were only two drugs which exerted a real and selective action on the nutrition of such new formations; iodine (including iodides) and mercury. Clinical experience afforded daily proof of their value; experimental research had not yet explained it. These remedies had a selective power over certain products, and not over others which might appear to be structurally identical to them. Thus, syphilitic gummata, strumous deposits, and tubercles were histologically similar; but mercury only affected the first, iodine the second, while the progress of the third was in no degree influenced by either of the two medicaments. Hemlock and its preparations were formerly in great repute as solvents; notwithstanding the discovery of conia, however, there was still no explanation of this special action of hemlock. It might possibly be due to its influence upon the nervous system. Its true value in this respect deserved further clinical investigation.

ON COLCHICUM AUTUMNALE AS AN ANTIPYRETIC.

Dr. Waterson, of Indianapolis, presented a paper on this subject. He believed that a true antipyretic prevented the production of heat, and that this production was at least controlled by the nervous system. Colchicum autumnale possessed a remarkable power, specific in character, over the organic nervous system, apart from its eliminative action, reducing the production of heat, at least temporarily. In suitable cases it was superior to, with wider range and greater power than, any other antipyretic. It was especially useful in all sthenic forms of hyperpyrexia, such as iritis, pneumonia, malarial and other fevers. Dr. Waterson had used colchicum extensively in the form of a wine of the seeds, combined, to avoid disturbance of the alimentary canal, with about equal parts by bulk of camphorated tincture of opium. He gave from one drop every ten minutes, to a newborn child, to half an ounce every thirty minutes, to a vigorous adult in dangerous sthenic hyperpyrexia.

An elaborate paper was read by Professor Böhm, of Marburg, upon the action of medicines upon the heart and blood vessels. The physiological action of muscarin and of duboisia were subjects of other papers.

ON THE INFLUENCE OF SULPHATE OF QUININE ON GLYCOSURIA.

By Jules Worms, M.D., Paris. The form of disease he described was not diabetes, but he considered it due to nervous exhaustion. He had been led to give quinine, in doses of twenty centigrams, twice a day. He had given it in about thirty cases, continuing it for fifteen or twenty days. This treatment had been invariably followed by marked diminution in the quantity of sugar excreted. Many patients suffering from this disorder spontaneously resume the treatment from time to time, and are conscious of an increase of functional activity while taking the alkaloid; this being coincident with a diminution in the amount of sugar excreted.

ON BROMIDE OF ETHYL.

By W. Squire, M.D., London. Dr. Squire discussed the action of bromide of ethyl as a local anæsthetic, as a general anæsthetic, and as a vaso-motor stimulant or sedative. By rapid evaporation, bromide of ethyl would freeze a limited portion of surface, but it caused insensibility to pain before freezing; and its vapor had the advantage over ether in being much less inflammable, though it is inflammable, as Dr. Squire demonstrated by experiment. It relieved the pain of neuralgia. Long contact with the skin would cause local irritation and vesication. As a general anæsthetic, bromide of ethyl was safe, and did not depress the heart, as chloroform did, or raise the blood pressure like ether. No cough or mucous secretion was excited. Its action was rapid, and recovery is very quick. It might be used by inhalation, short of producing unconsciousness, for the purpose of relieving dyspnœa, spasmodic cough, megrim, and neuralgia in various forms. This remedy might be useful in diagnosis, as it affords no relief to the symptoms of intracranial pressure or hyperæmia, or to the referred pains of subacute or chronic visceral disease. Dr. Squire gave some of the results observed from its employment in the treatment of hysteria and epilepsy.

ON THE UTILITY OF STRYCHNIA AS AN EXPECTORANT.

By J. Milner Fothergill, M.D., London. The experiments of Rokitansky had shown that strychnia was a powerful stimulant of the respiratory centres; and Dr. Fothergill had arrived at the same conclusion from his experiments upon rabbits. When the respiratory centre was paralyzed by aconite, the injection of strychnia exercised a most potent influence in restoring the circulation. He had used it clinically, with much success, when the respiration was embarrassed, in acute bronchitis with difficult expectoration, in chronic bronchitis and emphysema, and when the right ventricle was dilated, it added to the efficiency of digitalis.

Section of Aural Medicine.

Dr. Cassells read the abstract of his paper on "The Ætiology of Aural Exostoses." The chief points of his paper were these: an exostosis is a new growth; a hyperostosis, a hyperplasm. An exostosis appears before complete ossification of the meatus; a hyperostosis is never seen till after complete ossification. They differ from each other in origin, site, shape, structure, and number. He prefers the gouge for the removal of exostosis, the drill for hyperostosis. Dr. Guye believes that multiple hyperostoses never completely occlude the meatus, for as soon as the tumors touch one another they cease to grow, thus leaving a central passage for the escape of secretion.

Dr. Knapp related the result of his examination of 250 skulls of the mound builders; he found exostosis in 44 cases. The condition was supposed to be due to the habit of carrying foreign bodies in the meatus.

On the subject, "Loss of Hearing where the External and Middle Ears are Healthy," papers were read by Dr. Gellé, of Paris; "Physical Diagnosis of Affections of the Acoustic Apparatus, with Healthy Middle and Outer Ears," by Dr. Lucae, of Berlin; "On Certain Conditions of the Eyes as a Cause of Loss of Hearing by Reflex Irritation," by Dr. Stevens.

In connection with this subject Dr. Knapp related the result of his experiments on the loss of vision and hearing caused by large doses of quinine. In both the loss was temporary. The objective symptoms in the ear were negative; in the eye he found that the arteries of the retina almost disappeared, the veins were scarcely traceable, and the disc looked atrophied. The field of vision was narrowed on the inner side; light and color perception diminished. The return of sensibility to light passed from the centre to the periphery. Mr. Dalby said he could not doubt that large doses of quinine, long continued, did produce impairment of hearing; while Dr. Jones, of Chicago, stated that he had never seen a case of permanent impairment of hearing resulting from large doses of quinine.

Dr. Fournié read a paper "On the Functions of the Eustachian Tube." He believes that one of the essential functions of the tube is to prevent unpleasant resonance of external and internal noises, and that the muscles which are usually considered dilators are in reality obliterators of the tube; further, that the tube is shut by the tensor and levator-palati muscles, and opened by the palato-pharyngeus muscles and palato glossus. Dr. Rumbull did not agree with the conclusions of Dr. Fournié, but believed that the generally accepted views as to the action of the pharyngeal muscles were correct; and further, he holds that the air in the tympanic cavity is always in a state of slight rarefaction.

Dr. Knapp read a paper on "The Cotton-Wool Pellet as an Artificial Drumhead." Its advantages are: 1. It improves the hearing; 2. It protects the tympanic cavity from the noxious influences of the atmosphere; 3. It promotes a healthy condition of the cavity by absorbing the morbid secretions. He believes it improves the hearing, sometimes by bracing up the inco-malleal joint, sometimes by relaxing the pressure of the stapes on the fenestra ovales.

Dr. Woakes read a paper on "Paretic Deafness." The chief points he lays stress on in the diagnosis of this affection are: the negative symptoms, as regards the ear; the positive, as regards the palate and faucial regions. In a paper "On the Action of Syphilis on the Ear," Dr. Pierce, of Manchester, noticed that the effects of congenital and acquired syphilis on the ear are less observed than its effects on the eye, teeth, skin, etc. He discussed the question whether the obstinate symptoms of aural syphilis are due to a periostitis of the parts or to a proliferous form of inflammation of the mucous membrane. His summary of the characteristics of acquired and congenital syphilis affecting the ear is as follows: 1. The extreme degree of deafness manifested early in the progress of the disease. 2. The rapidity of the progress and the absence of pain. 3. The early and extreme loss of hearing for the tuning-fork over the vertex. 4. Constancy of the tinnitus. 5. Frequency of simultaneous inner-ear symptoms. 6. Less complete recovery than in simple catarrah.

Dr. Barr read a paper on "Caseous Accumu-

lations in the Middle Ear, Regarded as a Probable Cause of Miliary Tubercle." Papers were also read by Dr. MacBride, "On Some Difficulties Presented in the Diagnosis, Prognosis and Treatment of a Certain Form of Middle-ear Deafness;" and by Mr. Arthur Kinsey, "On the Prevention of Dumbness in those Cases where it Follows Loss of Hearing."

Editorial Department.

Periscope.

Treatment of Abscess of the Liver.

Dr. Henry Veale, Assistant Professor of Military Medicine, Netley, writes to the *Lancet* on this interesting subject:—

Considerable diversity of opinion has of late years existed with regard to the best method of treating abscess of the liver. It is agreed that when pus has formed it should be evacuated, if possible; but there seems to be no rule for deciding whether in any given case the evacuation should be effected by aspiration, by the insertion of a large trocar and cannula, with subsequent antiseptic drainage, or by incision under the antiseptic spray, followed by Listerian dressings. That the last-mentioned method is effectual, when it can be carried out, no one will doubt; but it has the disadvantage of entailing a surgical procedure, which may not only require much operative skill, but may also be attended with so much hemorrhage as to be dangerous to the life of the patient. The treatment by the trocar and cannula is easier, but it is certainly painful, owing to the necessity for repeatedly dilating or otherwise enlarging the opening, while the dressings must be conducted with all the care that is required for the method by incision.

The objections to the treatment by aspiration are: first, that there is sometimes a difficulty in withdrawing the purulent matter through the aspirating needle; second, that the operation must be repeated more or less frequently, and that the constitution of the patient may suffer from the profuse discharge of pus after such repeated tappings; third, that notwithstanding repeated aspirations, the treatment often proves ineffectual, and that incision, or the insertion of a large trocar and cannula, must, after all, be had recourse to in such cases. But to these objections it may be replied that even when the finest of the aspirating needles is introduced into a cavity containing pus, some of the latter will almost certainly flow through it, and it is only when the cavity has been emptied of the more fluid portion of its contents that the needle becomes obstructed. Besides, there is no necessity to restrict oneself to the use of such small needles as the No. 1 or No. 2 in aspirating a liver abscess. A No. 3, or even a No. 4 needle, if of the proper shape, may be employed with perfect safety, and I have never known a No. 4 needle to become obstructed. When the needle has a pen-shaped point it stretches and tears the tissues through which it passes; but if its point is chisel-shaped, as it ought to be, it seldom does any harm, even when of large size. Next, it may be conceded that, in the majority of cases, an abscess of the liver cannot be cured by one or two aspirations; but I see no reason why the secretion of pus should, on the whole, be greater when the cavity is emptied by aspiration than when it is laid entirely open. Such a cavity must contract and close by slow degrees, even when there is constant drainage; but in this case the discharge soaks into the dressings, and is not measured; whereas when we aspirate we seldom fail to measure the quantity withdrawn, which then makes a great impression on our senses. Finally, it is possible that we may fail to cure a liver abscess by aspiration alone; but if the aspiration has been conducted on sound principles, I believe it will be found to have hastened, not to have retarded the ultimate recovery.

On what principle, then, should the aspiration be conducted? The answer to this question is, that the aspirating needle must be regarded as a substitute for the drainage-tube, and it must be inserted as often as the circumstances of the case may require. The abscess cavity should never be allowed to refill to any considerable extent. As a general rule, there is a decrease of pain and of fever after a successful aspiration, and the next aspiration ought to be made before the pain and fever return. Under this treatment the cavity will certainly contract, and may close completely; but even if a cure be not at once effected, a great deal will have been gained, for there will remain only a small cavity instead of a large one to be dealt with when the open method of treatment is had recourse to.

The advantages of aspiration over the open method are its comparative painlessness, the ease with which it can be performed, and its applicability to all abscesses, irrespective of their site or direction; whereas the open method is suitable chiefly, if not solely, for those abscesses which point towards the anterior abdominal wall, and scarcely at all for those which form on the upper surface of the liver, and point towards the right lung. It is not always easy, in cases where fluctuation cannot be perceived, to decide whether or not an abscess exists. Œdema around the lower intercostal region on the right side, immobility more or less complete of the right lower ribs, pain in the shoulder or between the scapulæ, inability to lie on the left side, absence of the special signs of pleuritic effusion, and the antecedents, are the diagnostic points of chief importance. Dr. Hammond, of New York, has recently stated that when abscess exists, fluctuation can usually be perceived by placing two fingers of the left hand in the eighth intercostal space on the right side, a little in front of the mid-axillary line, and gently percussing with the

fingers of the other hand a little above and to the right of the umbilicus. I have tried this method on many occasions where abscess, pointing upwards towards the thorax, undoubtedly existed, but without being able to detect fluctuation. In reality, when there is a well-grounded suspicion of hepatic abscess, the insertion of the aspirating needle affords the best means of making a correct diagnosis. The needle should be entered in the eighth intercostal space, except when there is a distinct prominence elsewhere, somewhat in front of the mid-axillary line, and it should be passed in a somewhat upward direction, to the depth of three or four inches, if pus is not found before. If no purulent matter is found, it is advisable to wait a day or two before exploring again. The needle should then be passed in another direction, and will often discover the abscess.

Enemata of Peptones.

M. Henninger (Paris *Médical*, No. 29) gives the following formula for enemata of peptones: Five hundred grams of very lean meat, minced fine, are placed in a glass receiver, on which are poured three litres of water, and thirty cubic centimeters of hydrochloric acid, of density 1.15; to this is added two and a half grams of the pure pepsine of commerce, at the maximum of activity—that is to say, digesting about two hundred times its weight of moist fibrine. It is left to digest during twenty-four hours at a temperature of 45 Cent. (113 Fahr.), either in a water-bath or a stove; it is then decanted into a porcelain capsule, brought to boiling point; and while the liquid boils, an alkaline solution is poured into it (250 grams of carbonate of soda to 1000 grams of water), until it shows a very slight alkaline reaction. About 165 to 170 cubic centimeters of this solution must be added to it. When this result is obtained, the boiling liquid is passed through a fine linen cloth, the insoluble residue being expressed; and this liquid, which amounts to about two and a half litres (three pints) is reduced in the water bath to 1500 or 1800 cubic centimeters. Half of it is administered every day in three enemata, adding 200 grams of white sugar for the twenty-four hours. The whole of the meat is not dissolved; the fat, the tendons, the connective and elastic tissues, form an insoluble residue, amounting to about a third of the meat used.

Precautions in Thoracentesis.

M. Raynaud (*Journal de Médecine*) insists on a certain number of precautions which he considers it important to observe in thoracentesis. To avoid severe attacks of cough, which often occur in the course of the operation, and are extremely painful and inconvenient, he recommends the subcutaneous injection of a full dose of morphine before performing puncture. In this way the cough is almost always prevented, or, at least, very considerably diminished; rigorous cleansing of instruments, and especially of the trocar, with antiseptic solutions, he considers a matter of the utmost importance, and recommends the most minute precautions with the view of avoiding subsequent suppuration. The simplest method is to pass the instruments to be employed through the flame of a spirit lamp, and subsequently to plunge them in carbolic acid solution. When the operation for empyema and modified injections are employed, in lieu of leaving the patient seated, as is often done, it is preferable to lay him on the opposite side to that on which the operation has been performed: in this manner all the diseased parts are reached by the fluid, while, if the patient remains seated, the lower parts only are reached. Further, it must not be forgotten that the greatest care is necessary in performing these injections; for, in certain cases, rare it is true, but still far too frequent, epileptiform convulsions have followed, ending in rapid death. The washing out should, as far as possible, be performed by means of a syphon; or, if any other injecting apparatus is used, great care should be taken to prevent the jet produced from attaining too great a force and directly striking the lung.

The Diagnosis of Hereditary Syphilis.

Professor Parrot is now one of the leading French authorities on syphilis, and hence his opinions are authoritative. He observes that the diagnosis of infantile syphilis is often difficult, both on account of the multiplicity of forms which it may assume, and often because it is often necessary to make a retrospective diagnosis (*Ann. de Derm. et de Syphil.*, 1881, No. 1). Age is of great importance, as certain lesions only show themselves at certain periods of life. It is especially, however, the seat of the affections that has to be taken into consideration. The lesions generally appear on the thighs, the buttocks, the lower lip, and about the chin and angles of the eyelids. One sign, to which much importance has been attached, but which, according to M. Parrot, is often wanting, is the bistre tint of the skin, the cachectic look, and the senile aspect of the face. These are sometimes seen in syphilitic infants, but are most frequently due to malnutrition. All the eruptions due to inherited syphilis have more or less of a violet tint. An eruption due to malnutrition is of a more delicate rose color. The syphilides may be bullous, macular, papular, or vesico-pustular. Pemphigus is the earliest, for it sometimes appears at the sixth or seventh month of intra-uterine life. It is mostly observed at birth, when it is seated on the palms and soles. The contents of the bullæ are turbid or purulent. In children two months old, pemphigus may appear on the trunk and around the axillæ. Such an eruption is not syphilitic. The larger dimensions of the bullæ, the transparency of their contents, and the rapid desiccation, are sufficient to distinguish it from the syphilitic form. Macular and papular syphilides are similar to the corresponding affections in adults. The vesico-pustular eruption is the rarest and latest. The diagnosis is difficult. It begins as a papule surmounted by a vesicle, which quickly bursts, or as a red patch on which a bulla develops and rapidly ulcerates. The affection attacks the abdomen by preference. All these syphilides have a tendency to ulcerate,

in which case the ulceration may remain limited to the syphilitic lesion, but sometimes it extends more widely. When the ulcers progress very rapidly, and when they extend to the neck, tuberculosis is to be feared.

Origin of Typhoid Fever and Diphtheria.

Dr. William Strange, the President-elect of the British Medical Association, has the following in a recent address on the origin of tyhpoid fever and diphtheria:—

Let me briefly point out the direction in which I think we should work in order to add to our stock of real knowledge bearing upon the etiology of these two diseases.

1. I would suggest that all available facts as to the origin, spread, and true nature of enteric fever and diphtheria should be marshaled side by side, without prejudice or favor to any theory.

2. I would collate the facts derivable from the history of cognate diseases, such as cholera, yellow fever, erysipelas, and place them alongside the above; and also collate the phenomena of certain diseases of animals—chicken cholera, for example, with those observed as above.

3. Compare the conditions under which the diseases in these two last heads prevail with those observed of enteric fever and diphtheria.

4. Inferences may now be drawn which will be available as landmarks, or provisional propositions, with which to go to work in the construction of a theory of the origin of these two diseases.

Allow me, in conclusion, to state what I look upon as correlated facts already known in the inquiry.

I think it is proved that enteric fever, however it may have commenced, is sometimes propagated from person to person by close propinquity or actual contact with the intestinal discharges. I had a clear case of this in my own house. And a *materies morbi*, which may or may not be composed of living specific germs, is sometimes conveyed from the sick to the healthy *at a distance*, where it takes effect in producing exactly the same symptoms as in the initial case. But in this event, as in the great majority of cases at least, the sanitary surroundings of those who receive the disease are very faulty. This was the case with the epidemics of cholera, and it is still the case with the spread of diphtheria and erysipelas. These diseases seldom spread in a wholesome house or district.

It is also proved, as far as a negative proposition can be proved, that a *materies morbi* of unknown nature, be it fungoid or be it chemical in composition, is often bred in drains, sewers, privies, or on damp or foul surfaces, or in earth or water saturated with sewage matters; and that this *materies* gives origin to enteric fever and to diphtheria without the action of any specific germ derived from the body of a previous patient. Unless we accept this proposition as founded in fact, the origin of thousands of cases of these two diseases is involved in impenetrable mystery. And if this proposition be accepted, then we must conclude that some specific or quasi-specific organism (or germ, if you please), or else a mere chemical product, is formed in such matters, *de novo*.

These substances, organisms, or chemical products, whatever they be, undoubtedly become capable of self multiplication and intensification in the glands of the intestine on the one hand, and on the mucous membrane of the throat and pharynx on the other. They also now become capable of conveying their respective diseases by direct contact, as in the first-named proposition; and, to many minds, this is the usual order of events in the origin and diffusion of both enteric fever and diphtheria.

Finally, there are analogies observable between these two diseases and erysipelas and some well-known forms of septicæmia. Recent experiments, including those of Pasteur, Burdon-Sanderson, George Harley, and especially of Gravitz, go to show the remarkable fact that certain deleterious organisms—fungi, etc.—may be so cultivated, by repeated inoculation in living tissues, that, from comparative harmlessness, they pass on to a condition of true infectiveness, their virulence increasing with each fresh inoculation. Gravitz even believes, and in this he is supported by other German observers, that inoculation with germs of "low culture," or with a very minute quantity of the *materies*, will confer immunity from future attacks. Does not this lead up to the presumption, to say the least, that the poisons of typhoid and diphtheria, whatever may be their real essence, in passing through the bodies of patients, acquire increased virulence, and so give rise to those phenomena of direct contagion in some instances, which Dr. Budd and his followers so strenuously contend for in all?

Here, then, we come in sight of that *tertium quid*, that something *ab extra*, to which I have already alluded as apparently necessary to harmonize and reconcile the various conflicting phenomena of these diseases. And it will be in pushing investigations in this direction to their utmost attainable limits that I shall look for any real extension of our knowledge of them.

Treatment of Heart Diseases.

An interesting review of an article on this subject, in the *Italian Medical Gazette* of January, 1881, appears in the Lyon *Medical* of July 10, 1881. The writer of the article (Prof. Renzi) has evidently studied with care the actions of three important drugs largely used now-a-days in cases of heart disease—viz., bromide of potassium, iodide of potassium, and chloral hydrate; and he has given some important information regarding them. Bromide of potassium is shown to have such a direct influence on the heart and capillaries as to entitle it to a high position among the cardio-vascular drugs. According to Prof. Dujardin-Beaumetz, who considers it one of the best heart tonics we possess, the bromide, besides being a nervine sedative, acts directly on the heart, and lessens considerably any irregular action of that organ. He says that, as a nervine sedative, the drug is useful in counteracting the sleeplessness which so greatly enfeebles and wears out patients suffering from heart disease,

while its value in such cases is greatly enhanced by its direct beneficial action on the diseased organ itself. According to Prof. Sée (largely quoted along with Dujardin Beaumetz by the writer of the article), bromide of potassium is especially useful in heart affections where we have diminished arterial pressure, rapid and irregular action of the heart, passive congestions, œdema, cyanosis, dyspnœa, and sleeplessness.

Iodide of potassium is shown to be very beneficial in dyspnœa arising from heart disease. It is also of great value in arresting degenerative changes in the heart tissue.

The action of chloral hydrate on the heart, as observed by Prof. Renzi, is at once to diminish the rapidity of its action, and after a time to reduce its energy. The drug seems to act on the heart by paralyzing either the cardiac ganglia or the vasculo motor centres in the brain. The researches of Claude Bernard, Rokitanski, and others, would indicate that the latter are chiefly affected by the administration of chloral, for they found that it caused great diminution of blood pressure by dilatation of the capillaries.

In summing up his observations on the three drugs referred to, Prof. Renzi says of bromide of potassium that it lessens the anxiety of patients suffering from heart disease, gives them a certain sense of comfort, and enables them to breathe freely. Under its influence sleep is more easily obtained, is more tranquil, and of longer duration than when induced by other drugs. It is, moreover, a more natural sleep. The bromide reduces undue rapidity of the heart's action and of respiration. Cough, however, seems to be aggravated by the use of bromide of potassium alone.

Of iodide of potassium, he says that it is a most useful drug in diseases of the heart. One of its chief effects is a complete relief from dyspnœa and all asthmatic symptoms.

Chloral hydrate is not much esteemed by him. It can procure sleep of a kind, but is of no use in relieving the dyspnœa so troublesome in cases of heart disease. It is, moreover, dangerous when given in conjunction with iodide of potassium, the latter drug apparently having the effect of greatly increasing its soporific action.

From Prof. Renzi's summing up, it would seem that a combination of the iodide and bromide of potassium is a most beneficial remedy in cases of heart disease.

The Private Care of the Insane.

In a paper published in the *Alienist and Neurologist* for October, 1881, Dr. Ralph L. Parsons shows:—

1. That public institutions have hitherto been, and for an indefinite period in the future are likely to be, inadequate for the care of all the insane who need to be removed from their own homes.

2. That public asylums, on account of necessary economies, their great size, overcrowding and other causes, cannot become the best establishments for the care and treatment of all the insane.

3. That the smaller the number of insane patients associated together in one establishment, the better it is for the patients.

4. That the greater the ratio of sane persons associated with and in care of the insane, the better it is for the latter.

5. That chartered asylums, private institutions and private homes, each afford peculiar advantages for the care of the insane which cannot be afforded in public asylums; and, hence, that they supply a social need.

6. That the treatment of many, if not of a majority of the insane in an ordinary private house, is feasible; and that in suitable cases this method of care and treatment under family influences and associations, and apart from the associations and restraints necessarily incidental to institutions, has special advantages for the patient not otherwise attainable.

7. That many indigent insane persons who have hitherto been confined in public institutions might be satisfactorily cared for in private families in their own social sphere; and that judicious attempts to accomplish this object are advisable.

8. That whenever more than one insane patient is under care and treatment in the same house and family, a competent physician should be the head of the family and in responsible charge.

9. That every insane person who is not in immediate charge of his own relatives, at least, should be subject to State supervision, and should be under the professional care of a competent physician.

10. That while certain recent cases of insanity ought to be treated at their homes for at least a period of time, and while certain chronic cases may advisably remain at home permanently, it is for the best interest of the majority of insane patients and their relatives that provision be made for their care and treatment elsewhere.

Effects of Sexual Involution.

A writer in the London *Medical Times and Gazette*, says:—

Centuries ago, it was a customary thing to deprive youths of the power of propagating their species, for the purpose of preserving and further developing their admired soprano voices. Just as we rob the rose of its reproductive function for the sake of procuring smell, color, and size of flower, and, by careful selection of the specimens to be submitted to this process, do actually get a result of great value and beauty, so the experts of the middle ages, by judicious choice of the subject from whom they removed the parts essential to generation, produced that marvellous quality and compass of voice for which the *evirati* were valued. Scientifically, both are monstrosities.

We have passed from vegetable to human pathology. Let us now go a step further, into the realm of mental phenomena. The monk, by rigorous self-discipline, stamps out all thought of the joys of family life, puts from him all cares of fatherhood, and thus, dwarfing one side of his nature, developes in excess in another; attains an emotional exaltation, a vividness of realization of the things unseen, which cannot be attained among the anxieties, struggles and disappoint-

ments of the outer world; a state of strong feeling which is communicable, by burning words and speaking gestures, to others less fervid, and the possession of which has made the lives of such men—St. Bernard, for instance—among the most precious possessions of the world.

But, by maiming and dwarfing one set of faculties, we do not always get a result which is desirable. The deprivation of one function is not an advantage to the individual. Eunuchs have not always beautiful soprano voices, and the corruptions of monastic life have been often enough described. Whether the sexless rose will always be as much admired as it is, we will not discuss. Examined closely, with the aid of a magnifying glass, the barren repetition of petals does not present anything like the variety of beauty offered by the stamens, pistil, anthers, and pollen of the perfect flower. In diversity of form, delicacy of texture, and sweetness of color, the natural state of the plant is superior to the monotonous uniformity of the blossom which is the result of the gardener's interference.

Cure of Spina Bifida with Iodine Solution.

The Glasgow *Medical Journal* gives this case in a recent issue:—

The patient was an infant a month old. The cleft in the spine appears to be in the lower lumbar or upper sacral region. The tumor was almost as large as an infant's head, and was quite translucent, except a small portion at the base, where it was opaque; the skin evidently was thinned from distention, but the surface was quite sound. There was a slight longitudinal furrow, but there was no evidence of any septum. On May 25th chloroform was administered, about one half of the fluid within the tumor drawn off, and solution of iodine injected, according to the method devised and practiced by Dr. Morton, of Glasgow. The tumor slowly filled again, and within a day or two reached almost its former size. The skin, however, appeared to thicken, and gradually the tumor lessened in size, so that in the course of a few days all that remained of the tumor was a small nodule of thickened and puckered tissue at the site of the puncture, and some redundant skin altering to some extent the outline of the buttock The injecting of the tumor had no appreciable effect on the health of the child. When last seen, on August 22d, there was no tendency whatever to a return of the tumor, and the child was in good health.

Nerve Stretching in Locomotor Ataxy.

The attention that is being given to the subject of nerve-stretching as a curative measure in locomotor ataxy is leading to the operation being performed quite often. Dr. Davidson records two cases in the Liverpool *Medico Chirurgical Journal*. The first case is that of a joiner, thirty-six years of age, who had contracted syphilis sixteen years before. The spinal disease dated for about two years, commencing with attacks of bilious vomiting, headache and hazy vision; shooting pains in the legs began twelve months later, and characteristic ataxy set in. The patellar reflex was absent. The pains and gastric attacks continued, and four days after admission both sciatic nerves were stretched by Mr. Banks, the degree of extension being forty pounds, or about half the breaking weight of the sciatic nerve. The wounds were treated antiseptically. Convalescence was slow. At the end of three weeks, however, there was improvement in coördination and a slight return of the patellar reflex. There was no recurrence of the lightning pains and gastric attacks, and at the end of two months the patient could walk fairly well, the patellar reflex being still more evident. The second case was not so successful. The patient was thirty-four years old, and had first experienced shooting pains in the hands and arms about the spring of 1878. Since the beginning of 1879 he had suffered from frequent and severe attacks of vomiting. He was weak and emaciated, unable to walk without assistance, and his movements were characteristically ataxic, the arms being involved as well as the legs. The operation was performed as in the other case, and he recovered quickly from it, but the ataxia in the legs was not improved. However, the arms were better, and the pains and gastric attacks lessened. Dr. Davidson remarks that this case was more advanced than the other, and that the want of success in it "proves little against the treatment doing good in an earlier stage of the disease."

Reviews and Book Notices.

BOOK NOTICES.

A Practical Treatise on Hernia. By Joseph H Warren. M.D., etc. Second and revised edition. Fully illustrated. Boston: James R. Osgood & Co., 1882. Cloth, 8vo, pp. 428

The rapid exhaustion of the first edition of Dr. Warren's "Treatise on Hernia," and the call for a second edition in less than a year from the publication of the first, must certainly be very flattering to the author. In the present edition numerous changes and additions have been made, swelling the volume to nearly double its former size. Owing to the fact that stereotype plates of the former edition had been cast, and the desirability of utilizing the same where practicable, some of these additions have been heterogeneously huddled together into one chapter, instead of being introduced in their appropriate places in the text. The inconvenience of this has, however, been remedied by full references, which will enable the reader to connect the disconnected passages, and thus prevent confusion. Among the additions we find reference to quotations from some of the most recent contributions to the literature on hernia, embodying the results of the observations of several eminent surgeons; also, a résumé of clinical reports. Several new illustrations have also been introduced, while the appendix of the former edition has been omitted.

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IS THE OPIUM HABIT INJURIOUS?

One would suppose that if anything was well settled it is that the practice of opium eating is quite injurious. But a recent discussion in the English professional journals, partaken in by surgeons who had lived in China and India as well as by physicians of extensive observation in Great Britain, shows that there is far from a unity of opinion on this point.

One writer intimates that, even yet, the profession as well as the public are controlled in their imagination by the vivid pictures drawn by the magic pen of De Quincy. Many people have attained the age of sixty or seventy who have been habitual opium-eaters for thirty years or more. One surgeon, a determined opponent of opium as a luxury, says that such cases have come under his own observation, and adds that it does not appear that the Chinese in easy circumstances, who can obtain the ordinary comforts of life, are materially affected as regards longevity by this practice. Another, who for three years was resident in China, states, as the result of his experience, that the effects of the abuse of the drug do not often come under observation, and that when such cases do occur the habit is frequently found to have been induced by some painful chronic disorder, to escape from the suffering of which the patient has fled to this resource. He believes that, as regards the effects of the habitual use of the drug on the mass of the people, there is no evidence whatever.

A physician who practices in the Cambridgeshire fens, where the people habitually use a great deal of the drug, is convinced that the ill effects of opium-eating are much exaggerated. It is easy to recognize the opium-eater by the peculiar yellow, wrinkled skin; but these people live to a great age, frequently until they are eighty or ninety. Their only trouble is constipation, and this they overcome by taking large doses of jalap. The moral consequences are also slight, and are due chiefly to the fact that opium-eating is emphatically a secret vice. The opium taker is always ashamed of the habit, knows that he is wrong, and will tell any amount of lies rather than confess his weakness. It is ridiculous, he thinks, to compare opium with alcohol, which, when taken in anything like excess, ruins the health and fills our jails and workhouses. We should be inclined rather to class opium with tobacco in its ill effects (in excess) as regards the body. It is a noteworthy circumstance, that phthisis is uncommon in the Fen district, and is rarely met with among opium-eaters.

But these opinions were met by others just as positive on the other side, and speaking also from personal observation. Thus one of them says:—

Living in a large Chinese city, and brought into daily contact with the people, I came to the decided opinion that the habitual use of opium is most disastrous, alike in its physical and moral results. Hundreds of men came to me asking help in order to deliverance from the habit. These men, mostly of the working classes, would be earning about a shilling a day, and from a third to a half of their earnings would be spent on the luxury of the pipe. This brings out a characteristic difference between the use of alcoholic drinks and opium. It is but a small amount of opium that is represented by fourpence or sixpence a day; but once the *habit* is contracted, so

tight is the hold it takes upon a man, that when, through stress of circumstances, or dread of a still deeper entanglement, or conviction of the evil of the practice, he desires to escape from it, he is fain to seek all possible help to mitigate the extreme physical distress resulting from disuse of the drug.

In such a question we are inclined decidedly to the latter opinion quoted. Personal observation has convinced us in the strongest manner of the insidious nature of the habit, of the unfitness for the duties of life which it brings about, of its injurious effects on the general health, and of the supreme difficulty in renouncing it. This, too, is the result of the observations of the physicians in this country who have had charge of the institutions for the care of opium eaters. It is, therefore, important that neither the public nor the profession, especially perhaps the profession, take no light view of this matter. Generally the habit begins from a prescription, and it is apparently on the increase. Dr. EARLE, physician of the Washingtonian Home, Chicago, has published the result of some observations made by him on the subject of opium-taking.

During the last five years, he believes, the practice has increased, fostered, probably, by the ease with which the drug seems to be procurable. Thus fifty druggists of whom inquiries were made acknowledged to having 235 customers among them. Of these the great majority (169) were females; the age of the larger number of the victims of this pernicious habit was between thirty and forty years, and they were mostly of the middle class. Various reasons are given for taking the drug—*e. g.*, its stimulative and happy effect, previous addiction to drink, unhappy marriage, rheumatism, neuralgia, "female complaints," previous sickness, wounds received during the war, loss of property, and so on; but the great majority confess it was prescribed during some disease in which pain was a prominent symptom. Such being the case, the physician should be most sedulously on his guard in prescribing this drug. It is one possibly the most potent of all for good, and it is hardly less dangerous than the most destructive, on account of its insidious fascinations.

THE RELATION OF SCROFULA AND TUBERCULOSIS.

In a complete and very interesting communication to the *Soc. Medicale des Hôpitaux* on the relations existing between scrofula and tuberculosis, M. Grancher considers the question as regards etiology, pathology, and clinical appearances:—

First, as regards etiology: Scrofula, according to the dualists, is a diathesic and hereditary malady, while tuberculosis is parasitic and infectious. The first proposition, as regards scrofula, is universally admitted, but there is no proof that tuberculosis may not also be diathesic and hereditary. It is admitted that the sons and grandsons of patients with chronic arthritic diseases (Pidoux), and the offspring of degenerated races become tuberculous easily. Why, then, should the sons of tuberculous patients be an exception to the rule?

Pathological anatomy demonstrates in a neoplasm the presence of any specific element, or any peculiar arrangement of cells, fibres, and vessels, or, finally, if there is a particular evolution of the morbid processus. One element alone is not now considered sufficient to characterize a neoplasm; the cell of Lebert, the *Riesenzellen* of Shuppel, have no longer any value. The study of the texture, which has been the method of Virchow and the modern histologists, has led to the discovery of the tuberculous follicle (Friedlander and Kaster), and to the determination of the anatomical unity of tuberculosis (Grancher, Thaon, Charcot).

But the tuberculous follicle alone is not sufficiently characteristic, for it may be met with in other diseases—in syphilitic tumors (syphilome), for instance.

Proper attention should then be paid to the evolution of the malady. The question is whether the morbid processus, generally considered as scrofulous (chronic inflammations, suppurations, cicatricial sclerosis), are not in reality dominated by tuberculosis.

Tubercle has two periods of evolution: the first is microscopic, the tubercle passing succesively from the stage of infiltration to the

nodular state, after this becoming follicular; in the second, or microscopic stage conglomeration and generalization takes place.

In the first, the tubercle is in the embryonic state, constituting a local affection, benign and curable; in the second, it is perfected, it has attained the adult age, and invaded the organism. The tuberculous follicle, a local lesion anatomically imperfect and relatively benign, as in lupus, is not at all comparable to the gray granulation, well known from its characters of generalization and infection.

In the lesion termed scrofulous, tubercle is found sometimes in the state of tuberculous follicle, as in most cases of lupus and of chronic indurated adenitis; sometimes in the state of conglomerated tubercle as in cases of chronic osteitis and cold abscess (Lannelongue).

It can then be concluded that the two grand phases of development of tubercle are found in scrofulous lesions; the microscopic phase, or embryonic tubercle in children, and erosions of cutaneous or mucous surfaces; the microscopic or conglomerated tubercle in the adult in chronic osteitis and cold abscess. *Clinical observation* demonstrates that if there exists but one tuberculous disease, there are many varieties of tuberculous patients.

One variety realizes the complete evolution of tubercle. The patient has suffered from local benign scrofulous lesions while young; when he has arrived at the adult age bronchitis supervenes, and tubercle becomes fixed in the lung. Finally, gray granulations are disseminated in all the organs, meningitic accidents supervene, and death terminates the scene. But it suffices to recall the numerous forms of tuberculosis, granular phthisis, chronic phthisis, pneumonic phthisis, to show that the evolution of tubercle is often incomplete, and that the symptoms and physical signs may be so different in different individuals as to lead the most capable sometimes into error. These observations will be found of special interest in connection with the special report on tuberculosis we are now publishing.

Notes and Comments.

The Importance of Careful Diagnosis.

Dr. Joseph W. Thompson, of Paducah, Ky., relates in the Nashville *Journal of Medicine and Surgery*, for October, 1881, a case which forcibly illustrates this :—

Capt.—— has been suffering with severe pains in the right tibia, for the past ten years. It has been supposed to be of specific origin, and has been accordingly treated by several prominent surgeons. He has visited the Hot Springs, Ark., and has taken immense quantities of iodide potash (he estimates the cost at from $700 to $1000) during the past ten years—from all of which he has received only temporary relief—mainly from the use of the iodides in full doses; the pain recurring as often as the iodides have been lessened or discontinued.

In March, 1880, he consulted the author with the view of having his leg amputated, but after an examination of his case, he concurred in the opinion of others who had treated him, *i.e.*, that his trouble was specific, and that amputation was not demanded.

Again he was put on the iodide potash in full doses, and the iodide mercury granules, one-fourth grain, which treatment was continued seven months with only temporary relief.

Finally, after reflecting much about the case, and more thoroughly inquiring into its history, he concluded that the disease was not specific, but that it was the result of chronic inflammation of the periosteum, and probably involved the bone.

October 18th, 1880. Patient etherized by Dr. Maxwell. An incision six inches long was made over the tibia, well through the periosteum. The incision developed that the trouble was periosteal and sub-periosteal, and the bone seemed to be involved at the lower part of the incision in the form of a small *node*. With a Heys' saw the node was sawed through longitudinally, *i.e.*, parallel with the tibia down to the medullary structure which was found to be ossified.

The doctor ascribes the cause of the trouble to the fact that ten years previous, the steamer Little Rapidan sank in the Tennessee river, on a cold March day, Capt.—— commanding. In his efforts to rescue some ladies he got thoroughly wet, followed in a few hours by a hard chill and fever, accompanied with severe pain in the right tibia. The pain continued from th t time up to the operation above described, except when controlled by large and repeated doses of iodides.

Since the operation, nine months ago, he has suffered none of the usual pain and has taken no iodides after the fifth day.

Prolonged Retention of a Dead Fœtus.

Prof. Depaul presented at the Paris Académie de Médecine a specimen of a fœtus which was expelled after a pregnancy that had lasted between ten and eleven months. A young woman, who had already borne a child, ceased menstruating after September 8th, and she was delivered on August 14th of a child, which had died at the fifth month, and was expelled without the membranes having been ruptured, and exhibiting no signs of putrefaction. It is the first time that a pregnancy has occurred in Prof. Depaul's practice which has been prolonged between ten and eleven months, the fœtus not being expelled for from five to six months after its death. The mother, neither during her pregnancy, nor since her delivery, has presented any symptom of a morbid character whatever. This case, he observed, was only one to be added to many others proving that a fœtus dead in utero may sojourn therein for several months, providing that the membranes remained intact, without any injury to the mother. The macerated fœtus, on this occasion, did not exhale the slightest smell of putrefaction, although it had remained in contact with air and water during twenty-four hours.

The Etiology and Anatomy of Endometritis.

Dr. Karl Ruge, in a contribution to the *Zeitschrift für Geburtshülfe und Gynäkologie*, describes the morbid anatomy of endometritis. He distinguishes three forms of the disease—the interstitial, the glandular, and the mixed form. The *interstitial* form is characterized by general thickening and softening of the uterine lining membrane, due to the infiltration of the tissue with small round cells; the vessels are enlarged and tortuous, the glands unaffected. The *glandular* form is marked by increase in the gland tissue; the glands are widened, and diverticula branch from them in all directions; the membrane looks finely cystic or sieve-like, and is greatly thickened. In the *mixed* form these changes may either be combined, or they may be found quite separate and distinct at different parts of the same uterus. The interstitial form histologically approaches sarcoma; the glandular form is allied to adenoma. The interstitial form may occur at any age; the glandular form is more common in the later years of sexual life. Child bearing is a predisposing cause for each kind; the twenty-six cases examined by Dr. Ruge, excluding three who had no children, had had on an average six children each.

Defer's Method of Treatment of Simple Hydrocele.

Dr. Rol, in the *Bull. de Ther.*, praises this method of treatment, of which he gives the following description: The hydrocele is punctured with cannula and trocar, as usual, and evacuated; through the cannula is introduced a sound, on the end of which is fused a little piece of nitrate of silver; the interior of the tunica vaginalis is then rapidly touched at different points with this caustic, when the sound, and after it the cannula, are withdrawn. The results of this mode of treatment are said to be excellent. Notwithstanding the occurrence of a sharp inflammation, lasting five or six days, a cure is generally obtained, not by adhesion of the two surfaces of the tunica vaginalis, but by a simple vital modification of that membrane. The return of the effusion is rare. Defer's operation is thus described as perfectly safe, thoroughly efficacious, and easily performed.

The Etiology of Croupous Pneumonia.

According to Dr. Edward Sanders, in the *Archives of Medicine* for August, 1881, acute lobar pneumonia may be regarded as an acute infectious disease, dependent upon the introduction into the system of a specific poison, the visible expression of whose activity is a croupous inflammation of the lungs, and may be classed among the miasmatic-contagious group, belonging thus to the same class of maladies as typhoid fever. In all probability, the poison is taken into the organism by absorption through the lungs—that is, by inhalation.

Potassium Bromide in Orchitis and Inflamed Breast.

Dr. J. Grainer observes, in the *Virginia Medical Monthly* for September, 1881, that when consulted in time, he finds nothing else necessary, either in orchitis or milk breast, but potassium bromide, in five-grain doses three times a day, or smaller doses, more frequently repeated. In advanced or complicated cases, he thinks that auxiliary methods should be used, if only as a precaution, or to expedite the cure; but he has never had the bromide to fail him, even when used alone. In orchitis, a suspensory should always be worn. In some of these cases he has seen the disease held in abeyance for weeks, when the patients would persist in the grossest imprudence, in walking and horseback-riding. He rarely restricts them in diet. Yet even these cases eventually recovered, without suppuration

or atrophy. He has had no opportunity to test it in the metastatic orchitis of mumps, but feels sure it will prove as useful as in the ordinary cases, and he expects to find it efficient in the next epidemic forms of parotiditis he may meet with.

Unilateral Inflammation of the Tongue and Pharynx.

Dr. C. J. March, of Camden, Ark., states, in the St. Louis *Courier of Medicine*, for September, 1881, that he was called in the morning of July 15, 1881, to see a colored woman, aged about 35, and found her complaining of a slight headache; pulse and temperature normal and bowels constipated. The right side of her tongue was swollen to twice its normal thickness and the right side of the pharynx, including the tonsils on that side, swollen to a considerable degree. Deglutition was difficult, owing to the swollen condition of the tongue and pharynx, though it was not excessively painful. The submaxillary glands were enlarged, and there was quite marked tenderness on external pressure over the affected region. There was quite profuse salivation, the saliva coming mostly from the affected side. She complained of an itching or slightly burning sensation in the affected parts, but no pain, except when she attempted to swallow.

She said that some weeks before her upper lip had suddenly become swollen, and she had had circumscribed swelling on the chest; all of these swellings, both of the lip and on the chest, having been attended by the itching or burning sensation before mentioned. The swelling of the lip and the chest disappeared spontaneously. There were no menstrual derangements and nothing else to account for the affection.

The doctor prescribed five grains of cinchonidia and twenty drops tincture of chloride of iron, in water, every three hours, and a dose of compound cathartic pills for the constipation. This was followed by a prompt subsidence of the affection.

Chloral in the Treatment of Cerebro-Spinal Meningitis.

Dr. Geo. Goodhue, of Dayton, Ohio, in a paper published in the *Ohio Medical Journal*, for October, 1881, gives the history of a severe case which terminated in recovery, under the free use of chloral. The temperature on the first day was 106°. Twenty grains of chloral were administered every half hour, until three drachms had been taken, which reduced the temperature to 102°. The amount of chloral given during the twelve days he was ill amounted to 1015 grains. Milk constituted his entire diet, from time of attack till convalescence was fully established. It was made a part of his treatment to give him milk at regular intervals and in as great amount as his stomach would bear. The quantity which he took daily was not measured by drachms but by pints, and not once did his stomach refuse to perform the work imposed upon it; showing that chloral, even in such large doses, and frequently repeated for twelve days, did not interfere with nor impair in the least the functions of this important organ.

The therapeutical action of chloral in this disease the author sums up as follows:—

1st. It relieves the severe pain, either mechanically, by removing congestion, or as a true anesthetic, or, more probably, by a combined action in both directions.

2d. As a sequence of the relief of pain, muscular quietude is produced.

3d. By its hypnotic influence, abundant and refreshing sleep is obtained.

4th. By its antipyretic influence, temperature is reduced.

5th. It produces no constipation, but probably has a slight laxative effect.

6th. It does not disorder the stomach or materially alter any of the secretions.

7th. It produces no appreciable effect on heart or respiration.

8th. It is not cumulative in the system.

Surgical Treatment of Hydatid Cysts of the Liver.

In a recent memoir on the above subject, M. Roger, of Havre, arrives at the following conclusions:—

First. The slow opening by means of caustics is a painful and slow process, uncertain as regards the end it is desired to obtain, and having also its martyrology. Second. Capillary puncture, with or without aspiration, is successful if the cyst is unilocular, but not otherwise, and if several punctures are made there is danger the contents of the cyst may become purulent. The direct and primary puncture, with a trocar of large calibre, is the method accepted by the author. He allows the cannula of the trocar to remain until it is almost ready to drop from the wound; he considers that by that time adhesions have become established between the visceral peritoneum and that covering the external parietes of the abdomen, so that, consequently, when a rubber sound is introduced the liquid escapes outside the abdomen, and there will be no danger of peritonitis.

Special Reports.

NO. XVIII.—TUBERCULOSIS.

(*Continued from p. 474.*)

PERITONEAL TUBERCULOSIS IN CHILDREN.

Two recent papers on this subject deserve mention. Dr. Garlick (*Lancet*, December 25, 1880) states that the cases in which the lesion consists in a growth of tubercle in the peritoneum are very numerous and various in the appearances they present. Based on their clinical characters, he offers the following classification:—

1. Latent cases, either a part of a general tuberculosis, or secondary to tubercular ulcers. These are probably the most frequent, and "their latency results either from the absence of inflammatory change or from the obscuring of its symptoms by the more grave affections of other organs."

2. Cases characterized by an ascites, which may mask all other conditions. It is well known that the extent to which atrophy exists in these cases is very variable, being sometimes extreme, but even then may be completely absorbed. Sometimes the fluid is thrown out in pus, and a long-continued discharge may take place from the navel.

3. Cases presenting distinct abdominal tumors of various sizes and shapes, but with a characteristic hard, transverse ruler-like band, situated about or above the navel, sometimes stretching across the abdomen, and losing its definition at its extremities, or passing into other masses.

4. Cases in which all the abdominal contents and the abdominal wall are mutually and inextricably united, often with attendant intercommunication of different parts, so converting the abdomen into a trabeculated cavity.

The second paper is by Dr. Henoch (*Berlin. Klin. Woch.* No. 2, 1881). He relates the case of a boy 8 years old, the marked subject of peritoneal tubercle. The diagnosis of the disease is by no means always easy. Dr. H. refers especially to the absence of pain on pressure as a diagnostic symptom. Chronic non-tubercular peritonitis often gives rise to error, as it is often accompanied by decided emaciation.

TUBERCULOSIS OF THE BONES AND JOINTS.

In the treatment of this surgical complication a decided gain has been made by the employment of *iodoform*. At the last Congress of German Surgeons it was stated that this remedy had been used in Billroth's clinic since the beginning of the year with striking results. Wounds made in the extirpation of tumors, when sprinkled with iodoform and covered with a dressing of cotton-wool, healed without secretion, just as wounds heal by granulation under a scab; tubercular processes in the skin, as well as in the joints and bones, were definitely healed by this treatment. In cases of suspected tubercular disease of joints the injection of an ethereal solution of iodoform appears to be sufficient. If, however, fistulæ be present, the primary focus must be exposed, scooped out, and filled with iodoform; and the fistulæ themselves must be treated with iodoform and gelatine bougies. For injection, an emulsion of iodoform, with mucilage of acacia and water, is recommended, or a solution of one part in ten of ether, or of one in five of ether and five of oil. Iodoform does not excite any influence at a distance; so that, while very severe local disorders may be healed, death may occur from tubercle of internal organs. Hence, the constant contact of iodoform with the diseased granulating surfaces appears to be necessary. According to the researches of Mikulicz, the antiseptic action of iodoform is small but constant; this explains the necessity of its constant contact with the granulating surface. Iodoform does not prevent the formation of micrococci in blood and serum, nor of bacteria in Pasteur's fluid. Its active principle is iodine, which in the tissues is transformed into iodides of potassium and sodium. Toxic symptoms occur only in cases of large wounds, and are of short duration.

Dr. Gussenbauer stated that he could confirm the excellent action of iodoform, which he placed before all other known antiseptics as a means of producing healthy granulations. In nineteen cases of tuberculous affections he had hitherto met with seven rapid recoveries.

In this connection we must not omit to mention an extraordinary case reported by Dr. Battey in the *American Journal of Medical Science*, April, 1881:—

The case was that of a young man aged twenty, who suffered for nearly a year with suppurative inflammation of his left knee, and who presented the physical signs of consolidation of the left lung, in the upper part of which a large cavity existed. Amputation was thought advisable, but was delayed by advice of a consultant, on account of the advanced disease of the lung. Finally, the patient called for amputation of the thigh, to release him from the intolerable suffering, from which opiates had ceased to yield him relief. His condition was very unpromising, but the operation was performed, in order to grant him euthanasia. Much to the surprise of his attendants, he made a rapid recovery; the appetite and powers of assimilation returned; his spirits improved; he slept without opiates; and in one month was out of doors on crutches. A year afterwards he had grown fat, had lost his cough, and was apparently fully restored to health, so that he was enabled to engage in business. After enjoying excellent health, and leading an active out-door life for over three years after the operation, one day he had an accidental fit of

coughing while eating, which resulted in a fatal hemorrhage of the lungs.

This case suggests discussion of the question, What is to be done with a scrofulous joint in consumptive subjects? Dr. BATTEY concludes that, if there be a prospect of prompt healing of the stump, amputation is the appropriate remedy.

In a laborious series of papers in the *Practitioner*, for the last year, Dr. J. HAMILTON has been discussing the pathology of tubercle and pneumonia. His conclusions, so far as the former are concerned, are as follows:—

1. A tubercle, in all cases, when fully developed, consist of the following parts: one or more giant-cells, a surrounding reticulum formed by their processes, and a peripheral capsule.

2. The chief infecting sources of secondary tubercle of the lung are catarrhal pneumonia and interstitial pneumonia, accompanied by bronchiectasis. In both of these caseous matter is developed, and, being absorbed, excites the formation of tubercle in the surrounding connective tissues. The main causes of primary tubercle of the lung are softening, cheesy glands and strumous abscesses.

3. Tubercle is liable chiefly to two degenerations. The commoner is the caseous. The other is the conversion of the whole of the tubercle elements into fibrous tissue, and it is to be looked upon more in the light of the natural termination of tubercle development than as a degeneration. When it occurs extensively, it produces cirrhosis of the part.

4. Tubercle, under any circumstances, is a connective-tissue growth, arising from the action of an acute irritant. The irritant is probably a ferment generated in the softening of a caseous mass.

5. The hereditary tendency to phthisis is probably owing to an abnormally great susceptibility of the pulmonary epithelium to irritation.

CHEST MOVEMENTS IN PHTHISIS.

The characteristics of the chest movements in phthisis and their bearing on prognosis were the subject of a paper not long since read before the Manchester, England, Medical Society, by Dr. RANSOME. He exhibited diagrams showing the extent of movement in the forward and upward directions of the clavicles and third ribs in the two groups of cases. The larger extent of both forward and upward motion in the chronic cases, and the freedom of motion of the ribs over quiescent cavities, was pointed out, and the attempts at compensation by other parts of the chest-wall were found to have a favorable significance, especially when they took place in the forward direction, and were thus due to freedom from underlying restraint.

CLIMATES IN CONSUMPTION.

An excellent résumé on this subject, containing the latest views, is given by Dr. O. HEUBNER, of Leipzig, in the *Ærtzl. Vereinsblatt*, Mai, 1881. He divided them into—

1. High altitudes; Davos in Switzerland, Colorado, etc. Erethitic cases as a rule are not benefited; that is, those who on slight exertion have much increase of heart action, dyspnœa and flushing.

2. Warm, moist climates. Better suited for erethitic cases, those with dry cough, chronic catarrh and laryngeal complications. Persons usually debilitated in summer should not visit them.

3. Warm, dry climates. These are usually dusty, with rapid changes in temperature between night and day, and the exhalations from the surface of the body much more active. The best representative is Cairo and the adjacent desert.

Whenever a climate cure is chosen the patient must make up his mind to persist in it many months if not *years*; it is not a means that exerts a promptly and permanently beneficial effect. As no station is desirable all the year round, the patient should change his abode with the seasons. On his return home he should proceed slowly, taking various intermediate stations by the way.

TUBERCULOSIS IN INDIA.

It is an admitted fact, according to a paper read before the London Epidemiological Society by Dr. JOSEPH EWART, that phthisis is much less common among the native than the foreign population in India.

This comparative infrequency of tubercular disease among natives, attributed, 1, to the open-air life led by the people and the respiration of air uncontaminated, to an unusually great extent, with the products of that which has already been breathed; 2, to the wholesomeness of the food consumed, which is composed of a large proportion of the vegetable, with a minimum of the animal aliment, and is well seasoned, well cooked, and presented in an easily digestible form; 3, to the general temperance of the people, and the habit of the protracted suckling of the young often beyond the completion of the first dentition, or even longer; 4, to the influence of high temperature in mitigating the severity of bronchial, pulmonary, and pleuritic disease; 5, to the greatly diminished prevalence of measles, whooping-cough, scarlatina, mumps, etc.; 6, to the comparative exemption of native children and youths from inherited scrofula.

THE PNEUMATIC TREATMENT.

Since the publication of Dr. WALDENBURG'S remarkable researches on the value of compressed and rarefied air in the treatment of diseases of the respiratory organs, valuable applications of this method have been found. The experiments of the author, made with the view of

studying the influence of rarefication of air upon the circulation of the blood, have led him to certain definite conclusions, fully explaining the well-known beneficial effects of mountain air upon pulmonary phthisis and other diseases produced by deficient nutrition. These effects can be imitated by the pneumatic apparatus to considerable advantage. In Middlesex Hospital, London, according to a report of the Registrar (*British Medical Journal*, July 2, 1881), benefit has been derived from it in cases of phthisis with rapid contraction of the lung.

ANTISEPTIC INHALATIONS.

There can be no doubt of the benefit derived from antiseptic inhalations in phthisis. This benefit is chiefly in quieting the cough, and doing away with cough mixtures which are so sure to disturb the digestion. As a working formula Dr. J. G. SINCLAIR COGHILL, of the National Hospital for Consumption (*British Medical Journal*, May 28th, 1881), uses the following:—

℞.	Tinct. iodi ether,		
	Acidi carbolici,	āā	℥ ij
	Creasoti (or thymoli),		℥ j
	Alcoholis,	ad	℥ j. M.

Where the cough is urgent, chloroform or ether may be added at discretion. This is to be used in a respirator, a form of which has been devised by Dr. COGHILL for the purpose.

The apparatus is extremely simple. It consists of a space for a pledget of tow or cotton-wool, enclosed between the perforated surface of the respirator and an inner perforated plate, which can be raised so as to permit the tow to be saturated with the antiseptic solution. Elastic loops are attached to pass over the ears, and retain it in position. The inhaler may be procured either plain, or of a slightly smaller size, and covered with black cloth for wearing out of doors. The pledget of tow, which may be changed once a week or so, should be sprinkled with from ten to twenty drops of the antiseptic solution, from a drop-stoppered phial, twice a day, at least, according to the extent to which the inhaling may be carried on. Of this the patient is the best judge, and the length of time and quantity of solution should be regulated by tolerance and effect. The most important times for inhaling are for an hour or so before going to sleep at night, and after the morning expectoration, which leaves the suppurating surface or cavity dry, to be acted upon—disinfected, so to speak—by the antiseptic vapor. A great many patients come to use the respirator almost continuously day and night, from their experience of its good effects.

Dr. COGHILL attaches the utmost importance to the mode in which the respiration is conducted while inhaling. The patient should be carefully instructed to inspire through the mouth alone, and expire through the nose. In this way the breath is drawn through the saturated tow in the perforated chamber of the inhaler, and passes directly into the lungs laden with the antiseptic materials. Expiring through the nose only, necessarily involves a complete circulation of the medicated air. The breathing should be short at the beginning of the inhalation, but gradually deepened, so as to displace and affect the residual air in the more distant portions of the lungs. This form of respiration itself is not only of great use in favoring the circulation of the blood in the lungs, and thus aiding both local and general nutrition through that fluid, but it helps very much the expulsion of the sputa by means of the increased energy and thoroughness of the expiratory acts.

In the *Lancet*, Nov. 27, 1880, and May 14, 1881, may be found cases of acute phthisis which seem to have recovered under continuous antiseptic inhalations. They are reported by Dr. G. HUNTER MACKENZIE. He uses *creasote*, either pure or dissolved, in one to three parts of pure alcohol. Thymol he has found irritating and inefficient. He attributes his success to having the patients respire as *continuously* as possible an "antiseptic" atmosphere. The result obtained would appear to bear out the experiments of SCHULLER, of Griefswald, who found that animals rendered artificially tuberculous were cured by being made to inhale creasote water *for lengthened periods*. Intermittent spraying or inhaling does not produce the same result. In order to insure success the application to the lungs must be made *continuously*.

His respirator is not essentially different from that described above. Some directions for making a domestic or extempore one for the purpose are given by a correspondent of one of the English journals:—

Cut from an ordinary roll of wadding two pieces large enough to cover the nose and mouth. A diamond-shape answers very well. Now, remove the skin-like substance which coats the pieces; put them together, and fold them in a piece of thin muslin, to the ends of which ribbons may be sewn; and your inhaler is made. The writer used it for a couple of years, directing the patient to drop five or ten drops of creasote between the layers of wadding, fold it in the muslin, and to wear it for half an hour two or three times a day, or sometimes through the night. It is well to tell the patient to have two or three of them, as the moisture from the breath spoils the inhaler after a time.

INHALATIONS OF CARBOLIC ACID.

This method of taking carbolic acid has been employed with satisfactory results by Dr. W. WILLIAMS and other English physicians. He utilizes the carbolic gauze of Lister, and merely saturates it occasionally with an aqueous solution of carbolic acid. Mr. ROBERT HAMILTON (*British Medical Journal*, July 2, 1881) says he has treated several cases of phthisis in this way with good

results. The almost constant wearing of the respirator is sometimes an obstacle to this method, but the relief is so considerable that the patients speedily adapt themselves to it.

(To be continued.)

Correspondence.

Treatment of Nasal Catarrh.

Ed. Med. and Surg. Reporter:—

For a number of years after graduating I had a dread of treating catarrh, after hearing Dr. Agnew state, in one of his surgical clinics, that he never cured a case in less than six months, and it often required as much as one year. The very idea of the douches, washes, syringes, atomizers, vaporizers, bougies, etc., were repellant. I found the profession gave the subject but little attention; patients generally drifted into the hands of advertising philanthropists, clergymen, retired and otherwise. Indian doctors, East and West, quacks, etc. Perhaps two persons out of every five are afflicted with it, more or less. Thousands of cases have been treated, without cure or relief, by eminent and skillful physicians. The natural result is that post-nasal catarrh is considered incurable by the people.

The cause of failure has been due to a want of a proper understanding in the treatment. Some have treated it altogether locally, while others have relied on constitutional treatment alone. The proper plan is a judicious combination of both.

The trouble and expense attached to the treatments heretofore recommended have deterred both physician and patient from undertaking or undergoing a trial.

I do not propose to enter into a history of its etiology, pathology, etc. Its various forms, perhaps, originate from the same cause, its names, only varying in degrees and localities.

Its treatment is what we are particularly interested in. The cause should be inquired into, and removed, if possible. Observe the condition of the general health, the secretions of the alimentary canal, the kidneys, liver, skin, etc. These should be placed in proper condition if defective. If syphilis or scrofula exist they should be treated accordingly.

It is not necessary to go over the rounds of treatment ordinarily adopted. They are familiar, and are found in most text-books and journals.

Of all the therapeutic agents, I value none more highly than the preparations of petroleum, both locally and constitutional. Having used pills prepared from condensed petroleum, or petroleum mass, very extensively in bronchial and lung diseases, and having been time and again informed by patients that they cured their catarrh, I have used nothing else as a constitutional remedy for several years, and effected a cure in nearly all my cases, unless the catarrh was kept up by hypertrophy of the nasal mucous membrane. The formula I have usually used in making these pills is as follows:—

℞. Petroleum mass., ℥j
Pulv. cubebæ,
Pulv. ipecac comp., āā ℥ss.
Make pill mass—four-grain pills.

Sig.—One three or four times a day.

Use chlorate of potash in making Dover's powders, instead of sulphate. The petroleum and cubebs, by their specific action on the mucous membranes or respiratory tract, heal and soothe; they loosen up the debris which keeps up the irritation. In ozæna their action is palliative; much relief is often obtained; spiculæ of bone are often thrown off and discharged. I formerly used kerosene diluted with milk and used as a spray in an atomizer; this often gave satisfactory results, but since using the pills I have not found it necessary, only in exceptional cases, to resort to local treatment. I have had but a few patients that found it necessary to use the pills more than two or three months; often cases are cured in as many weeks. I now rather solicit business in that line, but formerly I preferred that the patient would go elsewhere. The plan is cheap, convenient, and efficacious. It has this to recommend it, that catarrh is often associated with other diseases of the respiratory apparatus, and no more efficacious treatment is found than the preparation above described. It is my sheet anchor in coughs, colds, asthma, bronchitis, and the best palliative in phthisis pulmonalis. The article by Dr. Strother, in July 2d, 1881, number of the Medical and Surgical Reporter, has brought to my notice many cases and reports of its therapeutic value. Being now located in the oil regions I will supply samples to the profession, and hope they will report results.

M. M. Griffith, M.D.

Bradford, Pa., Oct., 14th, 1881.

News and Miscellany.

Diphtheria in Russia.

We read in the *Journal de St. Petersburg* the details furnished by *l'Ordre* regarding the terrible ravages of diphtheria in Russia for the past ten years.

In a certain number of villages and parishes the disease carried off almost all the children under fifteen years of age.

In the opinion of the medical department no epidemic, not even the pest or the cholera, destroyed so many victims; and its ravages continue to spread over a larger surface; even the two capitals are no longer free from the disease.

The details given by *l'Ordre* are drawn from the statistics published by the government and the *Zemstro*. The epidemic of the past few years has been called "the great epidemic" and it is supposed to have originated in Bessarabia in 1872.

During the eight succeeding years it spread into Kerson, Podolia, in fact, to all the departments in the centre, and from that to the east and northwestern part of the empire. The epidemic seems to have followed the direction of the winds, which perhaps carried far the parasitic germs of the disease. The proportion of deaths was very large; thus, in Bessarabia from

1872 to 1879, there were 35,538 cases of diphtheria with 14,949 deaths; in the department of Poltava, which was the most seriously attacked, out of 45,543 persons attacked, 18,755 succumbed, and this in three years, from 1876 to 1879. In the province of Karkof, from 1878 to 1880, there were 28,750 patients and 17,045 died. And there is reason to suppose that these figures are less than the real mortality.

It is incontestable that the mortality increases in proportion to the number of cases of the disease.

But this "Great Epidemic" is not the only one that has spread desolation among the country districts of Russia.

Another very disastrous one raged about 1868, on the banks of the Don, but no exact information concerning its ravages can be obtained. According to the *Messager du Don* whole villages lost their entire infantile population.

In the single department of Khoper, in one year, 1868, up to 6000 children died from the disease.

In 1879 the same disease made its appearance in the province of Stravapol and spread thence over the entire Caucasus; but no exact information concerning its ravages or the number of victims can be obtained.

American Public Health Association.

The ninth Annual Session of the American Public Health Association will be held at Savannah, Ga., November 29th, to December 2d, inclusive. This Association is one which should attract the attention of the profession, as its objects are those of the greatest importance to the welfare of the public, and embrace what many consider the highest and ultimate aims of medicine, the prevention of disease and the improvement of the race through wise sanitation.

Accidents in Traveling Compared with Deaths by War.

An English surgeon, Dr. Hutton, in a recent address, gave the following as the number of persons who had been killed or wounded in connection with railways and railway service, and those who had lost their lives by drowning, in the United Kingdom, in the course of a single year. The railway casualties occurred last year, and are taken from the Board of Trade Returns. These returns show that from the 1st of January to the 31st of December, 1880, no less than 1136 passengers, railway servants, and others were killed, and 3958 injured on the various lines of railway in the United Kingdom. In addition, the railway companies returned 45 persons killed, and 2733 injured by accidents which occurred on their premises, but in which the movement of vehicles on the rails was not concerned. During the several South African and the Afghan campaigns, the number of officers, non commissioned officers, and men who were killed or died of their wounds, was 3200; while the number of wounded shown in the army return was 2178. Thus, while the number killed by wounds was greater in the wars mentioned, than those killed on the railways, the number injured and requiring surgical aid was more than three times greater on the various lines of railway and their premises in the United Kingdom in one year, than it was during all the period these campaigns lasted.

Alleged Cholera in Philadelphia.

The following correspondence, which we take from the *National Board of Health Bulletin*, illustrates how little foundation—in this case absolutely no foundation—may be required to interfere with the progress of commerce, and how much better it would be to have such interests regulated by an International Board of Health.

Official information having been received from the Department of State that by Royal Order, published in the Spanish *Official Gazette*, August 20, 1881, the port of Philadelphia was declared to be infected, in consequence of reports of the prevalence of cholera there, and directing that all vessels arriving at Malaga, which left Philadelphia after July 31, shall be considered foul and subjected to quarantine, a communication was addressed to the President of the Board of Health of Philadelphia, asking for information, and the following reply has been received:—

HEALTH OFFICE.
Phila., September 24, 1881.

I am directed by the Board of Health to transmit to you the following copy of resolution passed this date. Respectfully yours, etc.,
WM. P. TROTH, Chief Clerk.

T. J. TURNER, Medical Director, U.S.N.,
Secretary National Board of Health.

Resolved, That a copy of the communication of the Health Officer be forwarded to the Secretary of the National Board of Health, in reply to his communication of the 20th instant to the President of this Board.

COMMUNICATION OF THE HEALTH OFFICER.

HEALTH OFFICE,
September 24, 1881.

SIR: In answer to your inquiry, I have the honor to report that during the current year of 1881 not a single case of cholera has occurred in the city or port of Philadelphia.

Very respectfully,
JOHN E. ADDICKS, Health Officer.

GEN. HORATIO G. SICKEL,
President Board of Health.

The Money Cost of the Assassination.

The following paragraph is taken from one of our dailies: The expenses of the illness, death and funeral of President Garfield, covering a period of eighty five days, are estimated at $347,650, of which the United States will pay about $100,000 and the State of Ohio, the city of Cleveland, and private individuals, the balance. Private Secretary Brown estimates the cost of the President's sickness at $100,000, which would be at the rate of $1250 a day. Of this cost, the doctors' bills will form the largest item, say $53,000. Of this

amount Dr. Bliss will want $25,000, Drs. Agnew and Hamilton $12,000 each, Dr. Reyburn $8000, and Mrs. Doctor Edson $1000. Drs. Woodward and Barnes will get nothing, unless Congress chooses to recognize their services as being not strictly in the line of their duty as army officers. It is thought that the total cost of drugs will not exceed $500. Such things as beef extract, koumiss, whisky, brandy and wine were all donated, and there is understood to be no charge for services rendered by the Pennsylvania Railroad Company.

We understand from good authority, however, that up to the present, none of the attending physicians have sent in bills, so that the above is in that respect only a guess.

Hop Bitters.

We find in an exchange the following, given as the composition of this nostrum:—

℞.	Tincture of hops,	f. ℥ ss	
	Tincture of buchu,	℥ iij	
	Tincture of senega,	℥ iij	
	Podophyllin, gr. j dissolved in spirits of wine,	℥ ss	
	Tincture of cochineal,	gtt. xx	
	Distilled water, ad	℥ xvj.	M.

The cost of these ingredients, based on prices quoted, amounts to about ten cents. The selling price of the mixture is one dollar.

Vaccination in London.

The epidemic of smallpox which London has recently passed through, gives a special interest to the recently published memoir by Dr. Buchanan, physician to the Local Government Board. During the past twelve months, 1532 persons died of smallpox in London; of these, 325 had been vaccinated, and 637 had not been; the matter was doubtful for the remaining 570. It is estimated that of the population of London, 3,620,000 are vaccinated, and 190,000 are not.

From this it may be deduced that the proportion of deaths among unvaccinated persons is 3350 per million, while that for the vaccinated is only 90 per million. For individuals under twenty years of age, this difference is still more sensible; the proportion per million for the vaccinated being 61, and for the unvaccinated 4420; for children under five years, the proportion is 40½ per million for the vaccinated, the number of deaths reaching the startling figure of 5950 for the unvaccinated. As is remarked in the *Revue Générale l'Adminstration*, these statistics demonstrate that vaccination is much more efficacious in the first years of life than later, particularly after the twentieth year, which would tend to confirm the doctrine that revaccination is as important as primary vaccination almost, and should receive proper encouragement.

Dr. Buchanan arrives at the following conclusions: "The inhabitants of London can by vaccination protect their children from the chances of death by smallpox, in the proportion of 146 to 1 for the first five years of life, and in the proportion of 75 against 1 for the first twenty years.

Items.

—According to the *Pharmaceutische Zeitung*, July 29, of 850 analyses made in June, of food and beverages sold in Nice, no less than 559 were found to be seriously adulterated.

—During the meeting of the International Medical Congress in London some English and foreign doctors were discussing the style of apparel most suitable for the occasion of one of the conversazioni or receptions. Dr. Charcot, of Paris, quietly observed: "As for me, I shall go in my night-dress."

—Dr. James McClintock, of this city, died last week. Born in 1809, he was a graduate of the Jefferson Medical College, was at one time chief resident physician at the Philadelphia Almshouse, and later City Treasurer. He was a skilled surgeon and an able speaker, but for a number of years was not in harmony with the regular profession.

QUERIES AND REPLIES.

Solution of Nitrate of Silver.

Mr. Editor.—Would say, in reply to Dr. T. G. E., of W. Va: If he will make a solution of nitrate of silver in moderately pure water, make it slightly alkaline with aqua ammoniæ, then expose to strong sunlight, a week, then filter well and make it neutral with nitric acid, he will have no precipitate. Should not be exposed to light. A. T. Levick, M.D.

Woodville, Mo.

Tabes Dorsalis.

Mr. Editor.—In the last number of the Reporter, W. D. B. asks for advice on the treatment of tabes dorsalis.

The pathological condition in tabes dorsalis indicates the treatment, *i. e.*, hyperæmia of the pia mater and connective tissue of posterior column of spinal cord, which leads to hyperplasia of pia mater and structural changes in the nerve substance itself.

Absolute rest in the recumbent position, face downward, for a prolonged period, at least two months. Massage. A spinal bag reaching from the seventh cervical to the last lumbar vertebra, filled with ice and kept on the spine, with a double fold of blanketing interposed. After the congestive period has passed away use an *ascending* stabile current of thirty or forty elements, to the spinal cord, for ten minutes every day. The diminution of pain and improvement of bladder will soon be appreciable. Any diathetic condition must be met by proper treatment. Debility and anæmia by the phosphates, cod-liver oil and iron; syphilis by potassium iodide, etc. Free phosphorus has done some good in my hands. Use of strychnine would be manslaughter. J. G. B.

St. Paul, Minn.

MARRIAGES.

McCONNELL—CULLEY.—On Thursday, October 13th, 1881, at the residence of the bride's parents, by the Rev. Ross Stevenson, D.D., S. M. McConnell, M.D., of Wellsville, Ohio, and Miss Alice Culley, of Florence, Pa.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

PRESSURE ON THE SPINAL CORD FROM A SARCOMATOUS TUMOR.

A Clinical Lecture, delivered at the Hospital of the University of Pennsylvania, Sept. 20, 1881,

BY WILLIAM PEPPER, M.D.

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Gentlemen:—To-day I bring before you a very interesting case, and in many respects a very obscure one. Let me briefly give you his history.

He is fifty-eight years old, an American, born in New York State. He has worked on a railroad, but is at present a miner. He has two children living. Three died in early childhood, from unknown causes. He has been a constant drinker. There is no history of venereal disease. He has been questioned repeatedly on this point, but always maintains the same statement, so that we may assume that this is reliable as far as he is able to tell us. He has had intermittent fever and the ordinary diseases of childhood. There is no evidence of any malignant disease, or of any kind of tumor, in any member of his family.

Four years ago he noticed a small nodule growing over the left shoulder blade. Two years ago he got a severe cold. The lump then grew faster, and reached the size of two fists last March, when it was cut out in this institution. It was examined by Dr. Dunn, and found to be a large round cell sarcoma.

Six weeks after this growth was removed other smaller nodules appeared on different parts of the body. They gave no annoyance, and he continued well until about ten weeks ago—that is, the early part of July. He then began to have pain in the back, in the lumbar and dorsal regions. This was a dull pain, and extended down the thighs into the calves of the legs, and to the feet. This pain soon incapacitated him from any exertion. It was not worse at night. During the past ten weeks he has lost much flesh and strength. Within the past three weeks, in addition to these symptoms, there has been increased difficulty in walking. On admission, two weeks ago, he was emaciated and weak. There was no distinctly cachectic appearance, but the expression indicated suffering and ill health. There was no fever. The functions of the body were reasonably well performed. Over the trunk and limbs these small tumors were found to the number of fifty, varying from the size of a pea to that of a walnut. The skin is not altered over them, except in one or two instances. All but one have increased in size. This one, on the right forearm, was as large as a filbert in July. It is now the size of a pea. The lymphatic glands are not involved. There was some indigestion before he came to the hospital, but that has disappeared. He still has pains in the back and limbs, the knee and ankle joints being the parts most affected.

In the first place, let us study these tumors, locally; secondly, in relation to the system of the patient, in order to determine their nature; and lastly, let us study the cause of the symptoms which have lately appeared.

The tumors are sufficiently evident to you as he lies here uncovered. You see them everywhere. They are painless, hard, and irregularly

nodulated. Here is a large one over the chest. It is very movable. The skin is very slightly adherent. There is no infiltration of the skin. I can lift the skin from the lump, and can also lift the lump from the pectoral muscles. In no case is the skin over the tumor distinctly infiltrated. There is no enlargement of the lymphatic glands in the axilla or in the groin. In addition to these tumors, I find over the ilium on the left side a peculiar prominence, with a scar. On examination I find that there has been a spiculated fracture of the crest of the left ilium. This probably has nothing to do with the present trouble. There are no lumps on the legs. Examining the scar on the left shoulder, from which the first tumor was removed, I find it purplish in color, but healthy looking. There is no infiltration of the skin, and there is no secondary growth in the scar.

Such being the gross appearance of these tumors, what is their anatomical character? We can scarcely doubt that these nodules are sarcomata of the same anatomical structure as the one which was removed. This disease has not been conveyed from the original tumor by means of the lymphatics, nor is it explained by continuity of structure. It has developed by a series of eccentric points, involving distant parts of the body, bearing no direct connection with each other, indicating, so to speak, a constitutional dyscrasia, with a tendency to the formation of these tumors in different parts of the body.

Now as to the condition of the constitution. Although we find such a tendency to the formation of multiple growths, there is no evidence of what is called cachexia. What is meant by this word, and what is its value as a diagnostic symptom? When we say a person is cachectic, it is understood that he presents the appearance of a person with malignant disease. There is a peculiar anæmia of the skin, a peculiar pallidity of the lips. The whole surface is anæmic, and at the same time there is a special straw color, a sallow, yellowish tinge to the skin, indicating a profound alteration of the normal constitution of the blood. Where this symptom exists in a marked degree, it possesses great diagnostic value. For instance, a man presents himself with an obscure abdominal trouble. Although you suspect a malignant disease, you cannot find any tumor. If in such a case there is a marked cachexia, it is a strong additional reason for fearing malignant disease of some internal organ. As a rule, this cachexia is not associated with any febrile action, but this is not constant. Malignant disease, of itself, does not cause fever, but malignant disease may, by irritating adjacent tissues, excite a local disturbance, which will cause fever. Schirrus of the stomach will not of itself cause fever, but it may set up a local peritonitis which will excite fever. Take the chronic pyæmias, particularly those which originate from some internal cause, as ulcerative endocarditis, as ulcerative atheroma of the arteries, as embolism of the spleen and kidney, where the embolic patches undergo disintegration, and the blood becomes poisoned; in all such cases the patient gets a most intensely cachectic appearance, looking very much as though he had serious malignant disease, but we find that this is accompanied by a marked hectic fever, which helps us in the diagnosis. This cachexia is marked also in certain cases of chronic tubercular disease.

But the absence of cachexia is no proof that the patient has not malignant disease. Many cases of malignant disease exhibit no considerable cachexia until very late in their course, and perhaps not through the whole course of the disease. I have seen this true in regard to malignant disease of every organ of the body. It is especially true where the disease has not involved the lymphatic glands or the great visceral organs. The fact that this man presents no cachexia is no evidence as to the benign nature of these growths.

You will note that at the spot from which the tumor was removed there has been no re formation of the growth. This is frequently the case with sarcomata. They may not re form *in situ*; but their reappearance indicates a constitutional taint, and this is shown very forcibly in this case by the simultaneous development of such large numbers.

Now as to the explanation of the symptoms from which he has been complaining for the last few weeks. As long as they were limited to pain in the back and limbs, we might have explained them as merely rheumatoid pains, affecting him in consequence of his broken-down condition and resulting from ordinary causes, as exposure, dampness and the like; but besides pain, he has suffered from loss of strength, which has been very rapid within the last three weeks; particularly has there been loss of power in locomotion, far more rapid than could be explained by the loss of power in the muscles. Now, although this man's muscles are still well developed, he is barely able to walk about, and then only by the aid of a cane, and his gait is very peculiar. In the first place, the movements of his legs became weak and irregular—in other words, they became ataxic. He was unable to direct them as he

wished, and the movements were uncertain. He then took a cane, but even then his walk was very irregular and uncertain; the movements were not coördinate. We call that symptom muscular ataxia—motor ataxia. Both the loss of power and the ataxia have rapidly increased. Of course, these symptoms would lead us to suspect some organic disease of the nervous system.

Is this trouble due to pressure upon the nerve-trunks after they leave the spinal canal, or is it due to disease of the spinal cord itself, or, lastly, is it due to the formation of one of these tumors inside of the spinal canal, pressing on the cord?

In the first place, let us determine if there is any formation of tumors in the abdomen pressing on the sacral plexus. I am unable to find by pressing deeply into the abdominal cavity that there are any large tumors along the vertebral column. If there were any tumors in this situation, it is probable that they would occupy the lymphatic glands, but you have seen that there is no tendency to involvement of lymphatic structure. If we had found the glands of the axilla and groin enlarged, we should have suspected that the abdominal glands were in the same condition. Therefore, our failure to find any tumors in the abdomen is just what we should have expected Again, if it was a peripheral lesion, we should hardly find the loss of power and ataxia so symmetrical. If the trouble was dependent upon pressure on the nerve-trunks after leaving the canal, one leg would be involved more than the other.

Could this trouble be due to an organic disease of the spinal cord? It would be very improbable that a man with so many sarcomatous tumors scattered over his body should, in addition, have an organic disease of the spinal cord, independent of these formations. We have had no cause for organic disease of the cord, no syphilis, no excessive venery, no exposure to damp and cold, no injury to the spine, none of the causes that are frequently followed by organic spinal disease. It is true that, as this disease has advanced, it has presented some of the symptoms of locomotor ataxia. You will learn that locomotor ataxia is a disease of the posterior column of the cord. The connective tissue between the nerve tubules becomes inflamed, undergoes contraction, passes into a state of sclerosis, and presses upon the nerve tubules, so that they undergo atrophy. As a consequence, we have shooting pains in the extremities, progressive loss of control over the legs, and a certain amount of muscular debility. The disease frequently involves the eyes and arms, but it may remain limited to the lower part of the cord. The bladder is very often affected.

The ataxia in this case has developed very rapidly, within the past three weeks. In true locomotor ataxia, the trouble is not so much that the muscles have become weak, as it is that the brain has lost the power of controlling the legs, because the condition of the posterior columns of the cord interferes with the transmission of sensations from the extremities to the brain, and of orders from the brain to the muscles. There has been here such rapid progressive debility, that we should suspect something more than progressive locomotor ataxia.

Again, the pains have not been exactly like those of locomotor ataxia. In that disease, the pain is abrupt, varying greatly in position, coming on in the foot, then in the knee, then in the thigh, with great intensity, and then passing away to appear in another spot, as one or another nerve is irritated. This man's pains have been dull, and have remained in the same positions.

While there are several things against true locomotor ataxia, there are certain symptoms here, which we constantly have in true gray degeneration of the posterior columns. The most important one is the irritability of the muscles of the thigh. When in a healthy person the ligamentum patella is suddenly tapped, there is an instinctive contraction of the quadriceps femoris, and the foot is thrown out. In certain cases of spinal disease this tendon reflex is greatly increased. By tendon reflex I mean a reflex contraction produced by sudden irritation of a tendon. The most convenient way of developing this is by tapping the tendon at the patella. In progressive locomotor ataxia, this tendon reflex is lost. In this man, the tendon reflex is absolutely lost on both sides. This would indicate, as far as we have determined the value of the tendon reflex, a lesion of the posterior column of the cord.

A general consideration of this case would lead us to suspect that there was a tumor in the spinal canal. The ataxia and loss of reflex indicates that there is compression of the posterior columns of the cord.

I have no doubt that the proper diagnosis is, that our patient is suffering from a constitutional dyscrasia, with a tendency to the multiple formation of sarcomata in many parts of the body, and while, for the most part, these have involved the subcutaneous connective tissue, one has developed in the connective tissue of the spinal canal —the subarachnoid space probably—and devel-

oping there, it has caused pressure upon the spinal cord, particularly the posterior column, inducing ataxia and loss of the tendon reflex, and has now caused such pressure as to also interfere with the functions of the anterior column, tending towards paraplegia.

Now as to the prognosis and treatment of this case. Have we any encouragement to hope that we can cause the absorption of these growths? It was on this account, that I questioned the man so carefully in regard to the existence of any syphilitic disease. It is true, that the microscopical examination showed that the tumor removed, was a sarcoma; it is true, that the tumors do not present the ordinary features of gummy tumors, still, one grasps at a straw in such critical condition as this, and I should have been glad to find that this man was the subject of specific disease; but we are forbidden to entertain that idea at all. We have nothing in the natural history of sarcomata to lead us to infer that iodide of potassium or mercurials are capable of influencing their progress.

The only favorable feature in this case is the fact, apparently well attested, that this small growth over the head of the right radius has undergone progressive diminution, until, after having been as large as a filbert, it has become as small as a pea. There is no reason, as far as I can see, why this should have undergone this process, but if one has done it, why may not another?

We have put him on iodide of potassium as a sort of last resource, hoping that we may modify the growth of these tumors, or modify the irritative results and effects of pressure; but without any very definite hope, I confess. The remedies which are most likely to be of use in these cases belong to the class of great alteratives, iodide of potassium, arsenic and mercury. Perhaps no remedy can be used with more hope of doing good than Donovan's solution, the liquor arsenici et hydrargyri iodidi of the Pharmacopœia. I shall put him on ascending doses of this remedy, guarding its action by deodorized tincture of opium, so that we can give full doses without irritating the stomach and bowels. I shall begin with three drops, increasing gradually up to ten or twelve. If, after giving five or six drops, I find some irritation of the stomach, or looseness of the bowels, I shall add three, four or five drops of the deodorized tincture of opium. The medicine is to be given in two or three ounces of water, after eating.

If there should be any tenderness in the lumps, an ointment of belladonna will be ordered. He will receive the best diet, of whatever character he desires, and we shall endeavor to maintain the functions of the stomach and promote nutrition, hoping that we may favorably modify the development of these tumors.

Communications.

A CONTRIBUTION TO THE STUDY OF THE ETIOLOGY OF PUERPERAL HEMORRHAGE.

BY WILLARD H. MORSE, M.D.,
Of Pittsfield, Mass.

I desire in this paper to present to the notice of the medical profession the results of a study of some points in the intimate etiology of puerperal hemorrhage, that, although the inquiry is as yet far from complete, it may serve to awaken a general interest in a question which, while narrow in its immediate relations, is of a closely related and perennial importance. I may not be able to advance any views that are not now held by the many authors who have devoted a lifetime of research to the subject; but, satisfied that there is a channel still unexplored, my purpose will be realized if I am able to point out the means of exploration that lie at our command.

The causes of uterine hemorrhage have been variously classified. Each and all of the classifications have their merits, and, representing as they do the ideas of different authors, are severally deserving of consideration. Perhaps the best, and certainly the most rational of these divisions is that of Cazeaux. This division fixes the causes as three: predisposing, determining, and special. Following this classification, we are accustomed to delegate only a secondary importance to those causes which are numbered predisposing. Arbitrarily we assign something like prominence to the special etiology of this disorder, and to the determining causes devote but little more than cursory attention. In the realm of predisposition we have been taught to look for the purely extraneous, and investigation has not gone into any other than the most general and commonplace details.

Looked at with any degree of latitudinarian bias, predisposing causes would appear as insignificant as they are generally considered; but we are to remember that they may eventually lead into determining causes, or on the other hand may lay the foundation for any decidedly special. Causes purely predisposing have no foreign relations, and hence their reputation.

Yet all that is of them is essentially intercurrent with a foreign aspect of phenomena.

By a natural infinity of circumstances, conception works a change of many hues, not alone in the system of the woman considered as a whole, but also and more particularly in the relative conditions of all the genital organs. Although the application is general in its aspect, the one most considerable determination of change is that which takes place in the uterus. In every essential we find modification. Both functional and anatomical are the alterations, and include every relation of volume, structure, direction and form of the uterus. All of these are interdependent, and all causal. As concerned in the etiology of puerperal hemorrhage, the most important of these changes, by reason of their being the most predisposing, are those that re late to the uterine volume and structure.

The volume of the uterus is increased appreciably at each menstruation under action of the periodical congestion. Looking at fecundation as merely an artificial repetition of menstruation, we find that the same hypertrophy occurs, not spontaneously, but as the result of venereal excitement. This is of the moment, if we may so speak, and solely due to the same cause of production in menstruation—the evolution of a Graafian vesicle. But now occurs another and additional phenomena. The increase in the bulk of the walls does not begin only to end with a few days of excitement, but goes on with steady progress to the end of pregnancy. In no sense, as was once supposed, is this increase of bulk mechanical, but purely is it the consequence of augmentation of the muscular and development of the vascular apparatus of the parietes. Here we naturally pass to consider the occurrence of change in texture. Every constituent element undergoes change. The serous coat, under influence of a hidden motor of nutrition, expands and thickens. The mucous coat—in the virgin uterus seen alone by the aid of the microscope—becomes one vascular tissue. The muscular coat augments in bulk because of the "increase in size of the prëexisting muscular elements, and the formation of new ones." (Kölliker.)

I wish to call attention to the patent fact, revealed by histological coincidents, that it is this alteration in the texture of the muscular coat that lends most significance to the etiology of puerperal hemorrhage. In a consideration, we have to remember an exact idea of the arrangement of the three planes of muscular fibres that go to make up the uterine parietes. I confess to a preference for the descriptive anatomy of Hélie, as at once the most correct that has ever been written, and the most easy to understand. Hélie overthrows the once prevalent opinion of three distinct muscular layers, and describes that arrangement as too intricate to exist, inasmuch as the fibres of the layers pass from one to another. Nevertheless, the superposition being apparent, the French anatomist describes successively three layers.

For our purpose it is the most legitimate to consider that we have three layers to examine. The idea seems to prevail that there is an equality of change of fibrous structure in all three. But it remains to be demonstrated that either the external or internal layers possess any considerable tendency to develop an increase in the size of the original fibres, or to superadd other new fibres. To show proof of such an occurrence is virtually impossible, when we remember the anatomy of the muscular structure. It has never been my fortune to find any great increase of bulk in either layer, and with my experience agrees that of others who have had the privilege of far more extensive study. This is true not alone in the human uterus, but in that of the cow, the pig, the rabbit, and I doubt not of other animals. Very truly there is change in some measure, the internal layer changing more perfectly than the external, but both much less than the middle.

Why is this? A moment's attention to the anatomy of the three layers will furnish an answer as indisputable as a demonstration of the exact anatomy can do. The external layer is composed of a congeries of transverse and longitudinal planes arranged in regular alternation, and each exactly perfect. If the arrangement is transverse, then is that transversity precise and without encroachment of longitudinal or convoluted fibres. So in longitudinal planes—every fibre is longitudinal and none transverse. Consequent on this order of arrangement, there is little opportunity for excess of development. Each leaf that goes to make up the foliated layer is a layer in itself, and so admirable is the adjustment of nature that space for pathological change is wanting, except so far as extension and expansion go. With a trifling modification we may apply almost the same remarks to the internal layer. There the general arrangement of fibres is circular, with interlacing of traversing bands that go to make up the triangular fasiculus and its attendant elements, on the one hand, and to constitute and preserve the annular perfection on the other. There is little room for hypertrophy or hyperplasia. The histologist will meet

with gravid uteri that show no signs of the internal layer having received augmentation in bulk, while he will find perhaps as frequently others where a more or less extensive hypertrophy is apparent. This dissimilarity is marked. There are uteri where this layer is manifestly thickened, and others where the only change is expansion, with an occasion filling in of new tissue.

Before passing to consider the alterations that take place in the middle layer, we may inquire the reason why there exists this apparent favoritism. If we look at the fundamental laws of physiology at the outset, we shall not fail to assign a reason. To constitute hypertrophy, we have an abnormal nutrition as a causal force. In the increase in bulk of the uterus, because of the exaggeration of structure we do not have pure hypertrophy. There is excess of structural nourishment in part, and hpyerplasia in part. The primitive fibrillæ are enlarged, and new fibrillæ are generated. But still this is all due to hypernutrition. We are accustomed to hold that the uterus is changed in volume by new nutritives. Without disputing this, we necessarily come to ask why one muscular layer is not augmented as much as is another. It is no mystery. The outer layer expands, and to form a protective agency becomes a tough, fibrous envelope. The action of nutrition can be expended only for one purpose. If nature employs her material to strengthen the outer coat of the womb, she cannot at the same time use it to add new tissue or increase the old. To support this, we need only to cite that which all who have examined the uterus know to be a fact, the one well known anatomical condition that the outer coat of the gravid uterus is invariably of a fine, fibrous nature.

In reference to the inner layer, we may be as definitive. The French *savants*, notably Deville and his school, demonstrated long ago that the fibres of the internal layer in the recent gravid uterus are found deprived of the mucous membrane covering them, and the layer itself has become apparently thinner than in the non-gravid uterus. All this because the mucous membrane is impoverished by the decidua, and become a part of it. At the same time it is patent that if the material of nutrition is expended on the decidua, it is taken from the inner layer, which cannot increase as it would under the circumstances.

While there is but slight augmentation in the volume of the internal layer, and while the external layer is scarcely more augmented, the middle layer undergoes a volumetric increase greater than both others combined. To explain this we only need to know that this layer presents a most inconsistent irregularity of arrangement.

It is composed of bands of variable width, interlaced in all directions, and affording by this incongruity of position canals for vascular apparatus. Every fasiculus has its vein and artery. This close relationship serves to afford opportunity for extraordinary nutrition, and the consequence of this proximity is hypertrophy and hyperplasia. Here, more than in either other layer, new fibrillæ are generated. I have thought that in the majority of cases there is no other change than that which relates to the number of the fibrillæ. Yet this is not always provable, and may be but exceptional. However, hyperplasia has more to do with this increase of volume than does simple hypertrophy: and though the latter condition may in a measure obtain, the hyperplastic enlargement is ragnant.

On this one local expression in the middle layer depends much of the predisposing etiology of puerperal hemorrhage. It needs closer study than I have as yet been able to devote to the subject to show that the change of structure in the internal and external layers has anything to do with causative action. It may be possible that such is the case, but it is improbable that they have any such distinction, or if any it is necessarily inconsiderable. The sum of the etiology depends upon the middle layer, and the burden falls upon the characteristic development.

I ask attention to the appearance of the muscular fibres, and more epecially to their mode of arrangement. The subject is one deserving of the closest study, and yet the most cursory examination reveals the opening pages of the volume.

We know that it is uniformly the case for the fibrils of the muscles of inorganic life to be formed into flattened bands, which interlace in all directions, to form the compact whole. But in the middle coat of the uterus there is a difference. The bands have there gone to constitute the peculiar reticulate arrangement of the muscle, and the mesh-work is more loosely organized, and less homogeneous in appearance. Nor is this all. If we examine the same coat from a gravid uterus we find that every fibre is less perfectly made, their composition more exceedingly elementary, and their capability for contraction slighter than in the non-gravid uterus. Under a magnifying power of 300 diameters (350 according to Kölliker), the fibre-

cells of unstriped muscular tissue are clearly visible as spindle-shaped, with a rod-like nucleus brought clearly into view.

Studied with a high magnifying power, it is comparatively easy to determine a difference between the middle coat of the gravid uterus, and the same coat of the non-gravid. Speaking essentially, the fibre cells in the former are more elongated and less homogeneous-appearing than they are in the non-gravid uterus.

The nucleoli present the same tendency to elongation as do the nuclei.

Contrary to what might be expected, the fibres, though made up of larger cells than in the non-gravid uterus, do not closely band together. They clasp the arteries and veins in an uncertain grasp. They bind broken plane to broken plane with loss of tenacity. They strengthen their borders but feebly. The fact shows self-evident that there exists an anatomical state of things which go to place the uterus under a condition in which to ill resist any extraordinary force that may contribute to the exertion of its influence against the existing integrity of structure. That such an influence is resident in the vascular system of the uterus is one of the axioms of pathology.

A new order is introduced into the general circulation from the very commencement of pregnancy. The heart gains in systolic action, and does not lose in diastole. The respiration is obstructed. The blood rushes through its channels with newness of force. In the uterus its height of orgasm invites a determination of blood, and prompt to obey, the heart urges forword an abnormal supply of the life-giving fluid. The uterine vessels are surcharged, and the blood congests in the vessels of the neighboring parts as well. The demand necessitating the extra supply awakes the supply to ask an increase in the relative size of the vessels. All of the four arteries that nourish the organ increase in size, the ovarian seeming to take upon itself greater increase than the uterine. Every individual capillary enlarges. And here we must remember that the capillaries are naturally weak in their walls, and ill-adapted to stand the enormous increase of pressure. Still, without provision for the great change, they bear the burden, and bear it illy. Yet the capillaries are not destined to undergo as much as do the veins. These, though highly developed and freely anastomosing have a most remarkable parietal feebleness. The walls, composed of a single coat, adhere to the uterine tissue, forming the uterine sinuses. The absence of valves limits any token of consistency. Each vein sends out its ramifications—all more feeble than the vessel from which they originated, and each penetrating into the uterine cavity, and eventually into the placental substance.

Thus we see that the blood passes from the moderately sized arteries into abnormally enlarged capillaries, each one approximating in size to the trunk from which it arose, and feeble in proportion to its size, and thence returning, passing from very large venous branches into narrower trunks. Consequent on this arrangement there is, as has been graphically shown by Jacquemier, every provision for a venous stasis, which stasis predisposes to rupture of the vessels.

Briefly, therefore, the conditions to the etiology of puerperal hemorrhage are these: The middle layer is enormously developed by hypertrophy and hyperplasia, the hyperplastic elements being singularly lacking in homogeneity. Through this layer ramifies a plexus of vessels, largely increased in volume, and feeble in their walls.

This predisposition existent, there needs some accidental cause to favor hemorrhage. It may come in various shapes—fatigue, intemperance, venereal excesses, etc. Nature's harmony has been abbreviated, and it needs but a trifle to overthrow all that remains. The inharmonious exigency destroys the existent integrity and every just relation between the uterus and ovum—the one not yet habituated to its newness, the other placed in strange and inconsistent relations. The natural power that binds to place is lost, or, if not lost, is wholly infirm. The tissue in which the vessels ramify is delicate, because of the fresh genesis of fibrillæ, and no longer does it support the vascular apparatus with its primitive strength. A motor force is awaited by which to test that strength.

It will now be justly asked how any accidental cause may determine hemorrhage in the face of these relations. We are taught to regard the condition as one of apoplectic significance; yet to the unbiased student it cannot be proven by the fact that there obtains a state of apoplexy. I confess, as many another has confessed, that with my earliest experience I could not understand this. I may not have arrived at a satisfactory reason, but it seems one appropriate to the subject. In many cases of puerperal hemorrhage the patient will complain, or if not complaining will admit on questioning, that just prior to the flooding she "feels the movements of the child." In cases not a few the hemorrhage is an incident of the first three months of pregnancy; while, if we adopt the views of Mauriceau and others, the

fœtal movements cannot be properly felt until after the fourth month. Thus it is evident that the self-satisfied opinion of the woman is as ridiculous as unfounded. Nevertheless, we have no reason to doubt that patients experience a sensation so like as to be aptly considered to be a fœtal movement. The oft-reiterated testimony of many patients stand to support this. If it be not a true fœtal movement, to what shall we refer it? No more plausible answer can be given than to suppose this sensation to be essentially a spasm of the walls of the uterus. To be sure this is purely a theory, but I find that it has engaged the thought of such a scholar as Gendrin, although that distinguished authority attempts no explanation of the provinces of the theory. Considering then that the agency of some extraneous action provokes a spasmodic contraction of the uterine parietes, we are led to ask how this is accomplished. Agreeable to the investigations of Robert Lee, we may set forth in the bounds that he has prescribed, a reason referable to the uterine nervous system. Like the arteries and veins, the nerves also undergo hypertrophy, yet the parietal sensibility is scarcely altered. With the filaments from the ovarian plexus there exist frequent anastomoses of the sacral nerves. It follows, therefore, that any sudden or severe mental shock, and any extreme or protracted physical exertion, acts upon the uterine nerves through the spinal cord, and does so in preference to acting upon any other part of the nervous system, solely and simply because of the weakness then incident to these particular nerves in consequence of the neural and neurilemnal abnormal excess of development. I hope at some future time to be able to show some reason for this favoritism, the incident of which reason doubtless being resident in the intimate anatomy of the nerve substance. The general condition sufficing to direct our inquiry at this time, it seems self-evident that this impression upon the uterine nerves produces a spasm of the external layer of the uterine parietes, which layer compressing the middle layer, determines a sanguineous extravasation from its vessels.

This creates an extra condition of venous stasis, the utero-placental veins rupturing much more frequently than do the utero-placental arteries. This is due to the loss of contractile power in the fibres of the middle layer, and is in exact contrast to the extraordinary gain of the same power in the outer layer.

The natural outcome of these features causes either of the two conditions under which puerperal hemorrhage may exist, namely, a fluxion into the placental disk, or a rupture of the placental adhesions and consequent flooding.

This is the gist of the little which my study of this subject has taught me. Other investigators in the present state of the knowledge of the subject will confirm my views, even as we come upon the axioms of others as we unroll the book of our science. I lay claim to no originality in these thoughts. Attempting a careful study of this branch of obstetrical medicine, I have found it fascinating in the extreme, and capable of further development. In the intimate anatomy of the uterine parietes lies *all* of the predisposing etiology of puerperal hemorrhage. I have begun to work up this matter, and I hope that at another time I may lay the more matured results before the profession.

AUTUMNAL CONJUNCTIVITIS.

BY HENRY S. SCHELL, M.D.,
Of Philadelphia.

It is in the latter half of the month of August that an ocular affection usually commences, which is characterized by symptoms sufficiently peculiar to merit a separate description and designation.

The disorder is limited to the conjunctival sac and begins with an itching or pricking sensation, in or about the caruncula lachrymalis. In most cases both eyes are affected at the same time, although one of them is often, if not generally, worse than the other, not only at the beginning, but throughout the course of the malady.

The irritation soon spreads throughout the extent of the conjunctiva, but so long as the annoying sensations are yet moderate in degree they may be to some extent relieved by gentle pressure applied to the eyes. Turgescence of the vessels, however, shortly follows the itching, the eyeball becomes suffused and the inner surface of the lids red and swollen. As yet the greatest amount of congestion is found near the inner canthus. When the vascularity spreads to the entire conjunctival sac, intolerance of light comes on and an attempt to open the eyes provokes a free discharge of tears and mucus.

Paroxysms of itching now arise from time to time, without any apparent cause. They occur suddenly, at irregular intervals, and are attended with an almost irresistible desire to rub the eyes. If this inclination is yielded to all the symptoms immediately become intensified. The eyes burn, the papillary structure of the tarsal conjunctiva becomes hard and turgescent and, with every movement of the ball, grates against

the sensitive cornea, producing all the distress which follows the entrance of a foreign body into the conjunctival sac. The lids are red, swollen and œdematous, tears and mucus are poured out in abundance, and the skin of the lower lid soon becomes excoriated. Styes may occur occasionally and marginal blepharitis often arises and continues after the cessation of the original malady. The lids are found to be stuck together in the mornings and the eyes are opened with difficulty.

The disorder tends to become chronic, although it usually disappears with the occurrence of frost. As a general rule there is more or less nasal catarrh, with frequent sneezing, present from the beginning of the disease. Often, however, this accompaniment is so slight that the patient does not notice it, unless his attention is especially called to it by inquiry. On the other hand the ocular affection may be merely the initial symptom of an attack of hay fever.

It is important to be able to distinguish autumnal from ordinary catarrhal conjunctivitis, for the remedies which promptly relieve the latter will be found to aggravate the former. The distinction may ordinarily be made by taking into consideration the time of year when the malady occurs, the paroxysms of intense itching in and about the eyes which accompany the disease, and the nasal catarrh which is so frequently present.

Treatment.—So long as the acute symptoms persist the disease will be found to be aggravated by the local use of astringents, but the greatest relief will be obtained from the constant application of infusion of slippery elm bark or sassafras pith to the conjunctiva, with the use of cosmoline or vaseline to the eyelids. If the latter become excoriated, oxide of zinc in the proportion of three grains to the drachm may be added to the fatty matter. If the itching is intense, camphor water may be added to the demulcent infusion, in the proportion of one part of the former to four of the latter.

After the paroxyms of itching have decreased in frequency, borax may be cautiously added to the demulcent, at first in the strength of two, afterward of four, and finally of ten grains to the fluid ounce. But its use should be desisted from if it provokes a return of the itching. After the sensitiveness of the parts has subsided a collyrium of tannin, eight grains to the fluidounce, applied three times a day, will usually suffice for the cure. If the disorder continues, however, after the occurrence of frost, it will often be necessary, in order to hasten recovery, to give an impulse to the *vis medicatrix naturæ* by everting the lids and applying a four grain solution of nitrate of silver to their inner surfaces.

During the whole course of the affection, quinine should be administered, in doses of one or two grains, three or four times a day. Bromide of potassium should also be given at night, in quantities sufficient (ten to sixty grains) to allay irritability. If the patient is troubled with occasional alternations of heat and chilliness, or is very sensitive to currents of air, ten drops of the tincture of belladonna may be added to each dose of quinine. The eyes should, of course, be protected from the light by London smoke spectacles, or a shade, and should be given entire rest from near work. The administration of iron is often beneficial, if the patient is anæmic.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF DISEASES OF THE MIND AND NERVOUS SYSTEM.

BY PROF. WM. A. HAMMOND, M.D.

Reported by H. H. Seelye.

Hysterical Paralysis.

Case 1.—Prof. Hammond brought to the clinic a woman on whom he had recently been experimenting with magnets, in order to test the validity of some of Prof. Charcot's conclusions regarding the therapeutical power of magnets and metals, the correctness of which he said that he doubted.

The patient was apparently about thirty-five years of age, looking healthy, but not very intellectual. Before she entered the room, Prof. Hammond announced to the class that he had found that by moving a magnet back and forth a few times along the palmar surface of the forearm, but not quite touching it, the flexor muscles of the arm and hand would slowly contract, until the fingers became closed, and then the forearm flexed on the arm. The muscles would remain rigid in this position until he caused them to relax by repeating the same movements with the magnet, upon the dorsal surface of the forearm. He announced to the class that he now intended to try the same experiment with a piece of non-magnetized iron, shaped like a horseshoe magnet. Though he had not before tested it, he believed the same effect would be produced as by the true magnet.

The patient was now introduced, and Prof. Hammond gave her to understand that he was about to repeat his previous experiments, but that he would use another magnet stronger than before, which he thought would produce the same effect sooner. He then, with the non-magnetized iron, executed the movements described above. In a few moments the fingers began to close, and soon the hand became tightly shut, and then the forearm came up until it was completely flexed. On withdrawing the iron, the muscles remained

thus in tonic contraction, and would continue so, Prof. Hammond said, until he should release them. He then directed his assistant, Dr. G. M. Hammond, to endeavor to open her hand. This he accomplished with difficulty, and on letting it go, contraction of the muscles again ensued. The same maneuvers were now repeated on the dorsal surface of the arm, and in a few moments the muscles relaxed again suddenly, and returned to their normal condition. The patient was now removed, and the iron used was proven not to be a magnet.

Prof. Hammond then said, in reference to this and analogous cases, that he had often experimented with magnets in the treatment of certain forms of paralysis and muscular weakness and other nervous disorders, such as convulsions, headache, and anæsthesia. In some instances he had seen remarkable results. He did not think, however, that they were due to any inherent therapeutical power in the magnet, but that all the phenomena were due to the working of the "principle of suggestion" on the mind of the patient. This alone could account for many otherwise inexplicable cures.

The use of metal discs, or metalloscopy, he said was again coming into repute for the treatment of these nervous affections, and some experimenters had achieved great success. Here small discs of different metals are applied along an affected muscle, until a metal is found which seems to somewhat relieve the symptoms. Then a number of discs of the metal are bound over the part, and left there. At the same time a solution of some salt of the metal is administered internally. This method of treatment was first scientifically investigated and put to practical use about the year 1849. In reference to the curative properties apparently possessed by these metals, magnets, tuning-forks, and similar agents, Prof. Hammond made the remark, that we do not know what is the force that lies back of them. We only know that physically weak forces here produce physiologically great results.

Notes on Case 1.—The study of this case leads to the thought, what is the physically weak force behind these appliances which produces these physiologically great results? And how does this force act? The following is presented as an interesting, if not possible explanation of the mystery:—

A magnet is known to manifest its attractive power, principally toward iron. And when small particles of iron are brought into the vicinity of the poles of a magnet, they immediately become magnetized, and in turn attract neighboring particles to themselves. Nor will this action be prevented by the introduction of a non-conducting and thin medium between the magnet and the particles of iron. It is also known that the red corpuscles of the blood are largely composed of hæmoglobin, and that about five per cent of the hæmoglobin is pure iron. Each blood corpuscle may, therefore, be conceived to represent a minute particle of iron. If, therefore, a magnet be approached to the surface of the skin at any point, it follows that the red corpuscles in the vicinity will, by reason of their iron, be attracted to that point. Nor will the skin, though intervening, prevent this action.

If, now, the magnet be withdrawn from the surface, the corpuscles are free to again flow off in their natural channels. When again approached there will be a renewed flow of blood to the part; and as each corpuscle attracts and holds its neighbor, there will be a partial stasis or congestion at that point, until the blood is again released and allowed to flow off, by the withdrawal of the magnet. A complete stasis will, however, be prevented, because the forces which keep up the constant capillary circulation will probably act with more than enough power to overcome the detaining force of the magnet. Thus the circulation would still be kept up, while the flow of blood to the part would be increased.

We can now see how a paralyzed or atrophied muscle might be restored. For the blood is known to be the vehicle for carrying nutrition and supplying oxygen to the different tissues of the body, while it removes the carbonic acid and waste materials. If now any diseased part receives an excessive supply of pure blood, it therefore obtains more nourishment, and so is reinvigorated, while its morbid matter undergoes resolution and is absorbed and carried off by the circulation. This induced circulation will be more than ordinarily rich in red globules, and hence in nutrient qualities, from the fact that in a given space the red corpuscles will, by reason of their mutual attraction for each other, become aggregated together, and thus crowd out the plasma, which contains no iron.

It is evident that if this process is long enough continued, the diseased part will finally be restored, and thus fitted to resume its natural function. The truth or fallacy of these deductions might easily be demonstrated by watching under the microscope the circulation of the blood through the capillaries of a frog's foot, and noting whether or not there would result any modification in the flow when a magnet is approached into the vicinity of the stage.

The action of metallic disks, the galvanic and faradic currents, and perhaps other therapeutical measures, may possibly, with slight modifications, be similarly explained.

It is shown by a delicate galvanometer that contact of a metal with the skin or any tissue of the body will generate a current of electricity. So when a metallic disk is placed upon the surface of the skin, we may conceive it to form one element of a galvanic pile, while the iron of the blood acts as the other. A weak current of electricity is thus generated, which will, in a diminished degree, produce the same beneficial effects as a more powerful current. We can thus account for the success attributed to the use of metalloscopy. The presence of iron in the blood and tissues may also aid the passage of the electrical current from one part to another. For those tissues of the body which are best supplied with blood, and consequently contain the most iron in their structure, are found to be better conductors than those which have less. So muscles are better conductors than nerves, and nerves than cartilage. But as electricity is conducted by other metals as well as iron, those tissues which contain any metal in composition will also be good conductors, in proportion to the amount of metal they possess.

We might now speculate as to the possibility of accounting in a similar manner for the beneficial action which is often derived from the external application of hot fomentations, frictions, blisters, and the like, by the setting up of small currents of electricity, which are known to be generated by heat, friction, and chemical action. But these investigations, if carried out with scientific accuracy, might be found more interesting than profitable, while experiment would probably show that there is some fallacy in these theories, which would undoubtedly be found to lie in the fact that the salts and solutions of iron and other metals do not follow the same laws regarding magnetism and electricity as do these materials when uncombined.

Were it not for this fact, we might easily explain physiologically, as above, therapeutical effects, which must otherwise be referred to the action of the mental phenomena of expectant attention or to the laws of suggestion.

Bell's Paralysis.

Case 2.—The patient is a German woman about forty years of age, who presents symptoms of facial paralysis on one side. Otherwise she appears quite healthy. Six days ago, she says, she was exposed for some time to a cold draught of air on her face. Soon after she felt a pain in the side of her face, which continued for four days, and at the same time she was unable to use the muscles of expression on the right side. Her only treatment, so far, has been some bitter medicine, which was probably strychnine; but she has not improved any.

She presents now the following symptoms: If she attempts to laugh, only the muscles on the left side of the face contract, while the right side remains perfectly blank and expressionless. By the action of the unparalyzed half of the orbicularis oris, and the other muscles of the left side, the left corner of the mouth is drawn upward and outward, presenting thus a very peculiar and striking appearance. She is unable to completely close the eye on the affected side. In attempting to frown or elevate the eyebrows, the left half of the forehead alone is wrinkled. She cannot place her lips in position to whistle or to blow out a light.

After finishing his examination of the patient Prof. Hammond commented on the case as follows: The fact that only the muscles of expression are affected is sufficient to diagnose this form of paralysis from that due to hemiplegia, cerebral hemorrhage, and other causes. The lesion here is evidently in some part of the course of the seventh cranial nerve. The exposure to the cold draught probably set up a rheumatic inflammation of the nerve, which caused an effusion of coagulable lymph within the nerve sheath, which was followed by swelling, and hence pressure on some portion of the temporal bone. This pressure persisting, gave rise to the pain and the paralysis of the nerve. Long continued pressure on any nerve will cause paralysis of the parts supplied by it, as may be evidenced by sitting for some time with the arm hanging over the back of a chair, thus compressing the axillary nerves. When the facial nerve is paralyzed the eye affected cannot wink automatically, hence particles of dust collect on the conjunctiva, and the eye becomes inflamed, and tears form and trickle down the face. This inconvenience may be avoided by keeping the eye closed with a small piece of court plaster, when the patient goes out into the wind. This, also, has a slightly curative influence.

As to treatment, not one case in a thousand can be cured without the use of electricity in some form. The indications are to produce contraction of the paralyzed muscles. If tried early, the faradic current is very efficacious in accomplishing this end. In applying it, place one of the wet sponges of the machine just under the ear on the affected side, and touch all the paralyzed muscles in succession with the other sponge. This should be repeated every day until the patient gains some voluntary power over the muscles. With sittings of about fifteen minutes a day, this result will generally be attained within two or three weeks. After this, the application need only be made every other day, for a couple of months, or until perfect control over the muscles is restored. Another very beneficial procedure is, to put a hook, made for the purpose, into the angle of the mouth on the paralyzed side, and attach it by the other end to the ear, so as to draw back the relaxed muscles and keep them contracted. Such an apparatus may easily be made, by softening a piece of whalebone in a flame, when it may easily be bent into a hook of the required shape, and then should be polished smooth. It must be long enough to reach from the angle of the mouth to the back of the ear, around which it is retained by another bend. Or a simpler modification may be made from a lady's cloak-hook, to which is attached a small rubber band, which encircles the ear. This should be worn at night, and it will be found quite efficacious; often shortening the duration of the disease one half. A cure will frequently be effected by the use of mild galvanism, together with the hypodermic injection of strychnia. The solution may be prepared as follows: To one grain of sulphate of strychnia, add one ounce of water. Of this, inject ten drops the first day, into the face or calf of the leg, or better still, into the deltoid muscle. Increase the amount by one drop each day. It is rarely necessary to carry it beyond twenty or twenty-five drops. If the patient is seen while there is still some rheumatic effusion in the sheath of the nerve, blistering or cauterizing over the inflamed portion is often beneficial. By some of these means, about ninety-nine one-hundreths of the simple cases may be cured. If these measures are unsuccessful it is probably because the patient was seen too late.

This woman will come daily to my office to have the electricity applied, which will probably effect a speedy recovery.

Jan. 6th, 1881. The patient returned to the clinic to day, but she has received no treatment since her first appearance. She says she did not go to have the electricity applied, because she thought the paralysis would wear off of itself. She is now no better, and the symptoms are about as before. Prof. Hammond told her that because of her foolish negligence her case was now so far advanced that it might be difficult or

impossible to cure her. Dr. Morton, however, volunteered to try the application of electricity upon her, and thinks he will yet effect a cure.

Four weeks later the patient again presented herself, somewhat improved, having received four applications of electricity. She can now shut the eye almost completely and it does not water as much as before. The same treatment is to be continued.

Notes on Case 2.—The symptoms of facial paralysis may be produced from four other principal causes, than exposure to cold draught. Namely, from external injury; from disease of the ear involving the petrous portion of the temporal bone; from pressure of the parotid gland, by reason of a tumor in it; and from a tumor or other disease in the brain. Besides this, it frequently follows as one of the sequelæ of other diseases, such as diphtheria, for instance. In newborn children it is also sometimes present where the forceps used in delivery has pressed upon the facial nerve.

The paralysis is generally on only one side of the face, but it may involve both.

Other symptoms which may be present, but which were not noted above, are the following: The saliva sometimes dribbles from the side of the mouth; the food collects in the paralyzed cheek; there is a puffing motion of the cheek; articulation is indistinct; deglutition is interfered with; and the muscles of the nostrils are collapsed. The paralyzed half of the mouth opens and closes less completely than the sound half, and the uvula may be drawn to one side. There may be earache, or neuralgia of the fifth nerve; and sometimes there is deafness in the ear on the affected side. The eye remains open during sleep, as well as in the daytime. The location of the primary lesion may often be determined by the presence or absence of certain symptoms. Thus, when the disease involves the chorda tympani, there is likely to be overacuteness and painfulness of hearing, dryness of half of the tongue, and some impairment of taste; and if the petrosal nerves are involved there will be paralysis of half of the soft palate, so that the uvula curves away from the affected side. If the disease is at or near the internal auditory meatus, the involvement of the auditory nerve may cause deafness. If the common nucleus of the sixth and seventh nerves is involved, there will be paralysis of the external rectus muscle, and hence internal strabismus in one eye. If the disease be of centric, or cerebral origin, it will probably be accompanied by hemiplegia in some of the other muscles, as well.

This affection is sometimes called "Bell's Paralysis," from Sir Charles Bell, who first described it, having produced it by cutting the faciel nerve for neuralgia of the trigeminus.

As so large a proportion of these cases are treated by electricity in some form, it is perhaps well to recall some of the effects produced by the different methods of its application. The same laws will apply to other paralyses as well as to that of the facial muscles. By the action of the electrical current, the source and extent of the disease may often be determined. Thus it has been demonstrated that if the lesion is in a motor nerve only, the muscle will respond more feebly than normal, to both the galvanic and faradaic current; or if the nerve is destroyed at its centric origin in the ganglion cell, or in its course from thence to the muscle, there will be no response to electricity. But if the muscular tissue has become degenerated by the disease, the muscle will react with less than normal power, or not at all, to the faradaic current, and likewise at first to the galvanic, but it soon regains its contractile power under this latter application, and then reacts to it with much more vigor than normally, and with a feebler current.

Moreover, whereas in normal muscular tissue, when a weak current is applied to the muscle by the negative pole, on closing the circuit the muscles will contract; if the muscle is diseased, the positive pole will cause the contraction, on closing the circuit, but the negative pole on opening the circuit. The natural action of the galvanic current is hence reversed as regards the poles, in the case of a diseased muscle.

By applying this knowledge of the action of the faradaic and galvanic currents, we may determine whether the nerve alone, or the nerve and muscle both, are diseased. Thus in facial paralysis, if the reaction to both galvanism and faradism is merely lessened, the nerve only is affected. But if there is no reaction to faradism, while the response to galvanism is exaggerated above the normal, and at the same time the negative pole causes contraction on opening the circuit, with a feeble current, and the positive on closing it, then we may conclude that the muscles also are becoming degenerated and are undergoing muscular atrophy.

If the motor nerve also is found to be diseased, galvanism, if properly applied, or, better, in conjunction with faradism, will probably induce recovery. But if the disease has also involved the muscular structure, or has its origin in a brain lesion, it is beyond the influence of electricity.

Thus we find electricity valuable, not only as an aid in diagnosing facial and other paralyses, but also and chiefly as a remedial agent in both muscular and nervous derangements.

Palmar Eczema.

In *l'Union Médicale* we find the following treatment, that of Drs. Lush and Liveing. The following lotion is used to calm the intolerable itching, in chronic eczema of the palm of the hand:—

℞.		
	Sodæ bicarb.,	ʒ ij
	Potass. bicarb.,	ʒ j
	Glycerin.,	ʒ j
	Tr. opii,	ʒ iss
	Aquæ,	ʒ viss. M.

In very obstinate cases, where the skin has become very fragile, Dr. Liveing recommends the following solution:—

℞.		
	Liq. potass,	ʒ iss
	Aq. destill.,	ʒ viss. M.

This should be used as a lotion until the skin commences to peel off.

He has also found that rubber gloves were of benefit. The internal administration of arsenic proved efficacious.

Editorial Department.

Periscope.

Has Each of the Zymotic Diseases a Specific Poison?

As bearing upon this question, Dr. G. Hayward Coburn, of Frederickton, N. B., Canada, writes to the Philadelphia *Medical Times*, Oct., 8th, 1881:—

January 30th, I was called to see Ethel G. æt. 12. I found a well-marked case of diphtheria; pain in head and back, high pulse and temperature, false membrane covering both tonsils and uvula. *No signs of any rash upon body; had had scarlatina.* Under use of potass. chlor., gr. iij, and tinct. ferri chlor., ♏ xij, every half hour for twenty four hours, and subsequently at longer intervals, with the use of carbolic spray locally, the symptoms rapidly subsided. Some of the ordinary sequelæ followed, such as weakness of lower limbs, partial paralysis of voice and deglutition, etc.

February 4th, Maud G., æt. 14, Edie G., æt. 6, and Lola G., æt. 4, were taken sick—headache, vomiting, etc.—and I expected the usual manifestations of diphtheria to follow. Somewhat to my surprise, on the third day *a bright scarlatinous rash*, covering the whole body, appeared. None of these had had scarlet fever. No false membrane appeared in the fauces of Maud or of Lola, though there was some angina. Their cases ran mildly through the usual course, followed by abundant desquamation. In Edie the anginose symptoms were very severe, with abundant and successive crops of false membrane. All her symptoms indicated serious blood-poisoning. For eight or ten days the temperature ranged from 103° F. to 105° F. Great swelling of lymphatic glands of neck occurred, with various symptoms indicating extreme adynamia. On the fifteenth day I opened a large abscess on right side of neck; the pus was very offensive, and so irritating that it caused the skin around to inflame and ulcerate. Three days after a deeply-seated abscess formed on the left side, causing difficulty of breathing from pressure upon the trachea; this I at once opened. Finally, in spite of free stimulation by means of quinine, brandy, carbonate of ammonium and camphor, she continued to sink, and died on the twenty-first day of illness.

In the meantime, Mrs. G., who was worn out by constant nursing, was exposed to cold, which was followed by a sharp attack of acute rheumatism; temperature 104° to 105° F.; much pain and swelling of ankle-, wrist, and finger-joints. These symptoms were promptly arrested by large doses of salicylic acid.

February 21st, or at the time of Edie's death, Lola G., who, it will be remembered, was convalescing from scarlatina, was again taken sick, and in two or three days a typical case of measles was developed. At the same time, Mina G., æt. 1, broke out with measles. Harry G., twin brother of Mina, had no rash, but in a few days a swelling was noticed in his right groin, which extended downward until it reached the knee. The whole thigh became as hard as a brickbat, terminating in an abrupt line at Poupart's ligament. This I attributed (whether correctly or not) to thrombosis. Under the assiduous use of poppy fomentations and inunctions with blue ointment and extract of belladonna, the swelling and hardness disappeared, except just below the groin, where an abscess formed; this I incised. Diffuse cellular inflammation followed, and I had to extend the original incision in several directions, to allow separation of sloughs. The whole cellular tissue of the femoral triangle sloughed out, leaving the muscles and deep fascia exposed. Under the use of carbolized irrigations and dressings, the immense hole healed by granulations, and a good recovery followed.

On the Cold-Water Treatment of Scarlatina Maligna.

In a paper read before the Canada Medical Association, at Halifax, N. S., August 3d, 1881, and published in the *Canada Lancet* for October, Dr. A. Worthington, of Iroquois, Ont., says that prior to 1855, when he first commenced the cold-water treatment, he lost about thirty-three per cent of his cases. In the spring of 1855 an epidemic broke out which proved both malignant and extensive. During this epidemic he visited most of the families within his circle, and became the terror of parents; for, having in the meantime looked up carefully the literature of scarlatina, he had come upon a small work on children, by J. F. Meigs, of Philadelphia, in which he found a letter to the author, giving the history of a number of cases treated by cold sponging, ice to the throat, externally and internally, and ice-water poured over the head and body, nearly all of which recovered. This letter was written at the request of the author by Dr. Hiram Corson, of Pennsylvania, in which he credits the origin of the cold water treatment to Dr. Samuel Jackson, whose articles on the subject appeared in the *American Journal of Medical Sciences* for May and August, 1847, and its perusal fully decided him to try cold water. His plan was to pour ice cold water over the patient's head and neck for a couple of hours at a time, to sponge the entire body frequently, and to keep cloths wrung out of cold water constantly around the neck. He used no medicine, except to keep the bowels open. Although he met with much opposition from parents, he never relented, and always ended by having his own way. He reports innumerable cases, all of which recovered. In one house five children were down; in another nine. The latter were all delirious, but under a constant stream of cold water their reason returned in about two hours. Recovery was always rapid, and no bad sequelæ followed. During an epidemic which occurred in the northern part of Huron County, in 1863, however, the Doctor states that though the cold-water treatment proved fairly successful, a number of

cases ended fatally, which his former experience had led him to think ought to have been saved. Says he: "There was a difference, in a remarkable way, in the character of the epidemics of 1855 and 1863. That of 1855, in most of the malignant cases, attacked the brain, and through it the nervous system, producing a tendency to death by coma, and indicating such a form of treatment as would relieve the brain from the overwhelming effects of the poison. This was most effectually found in the cold-water treatment, very little support being needed; while in the epidemic of 1863 the heart seemed to be the point of attack, causing great debility and prostration, producing a tendency to death by asthenia, indicating the necessity of tonics and stimulants from the first, as also strong nutrition and moderate application of cold, more especially to the throat. The mind in the last mentioned epidemic usually remained clear, and I have reason to think that if I had commenced the use of tonics and stimulants earlier I would have saved several patients who ultimately succumbed."

Extra-Uterine Pregnancy.

The following report of a case of extra-uterine pregnancy appeared in the *Medical Annals* for September, 1881:—

Mrs. B. was married in 1871, and became pregnant in 1874 for the first time. At each monthly period after, she had a thin, pinkish discharge different from her usual menses. In the fall of 1874, she was taken with severe abdominal pains and had a watery discharge from the vagina. Her mother and married sister told her she was threatened with a miscarriage, as the waters had broken. A physician was called; he considered her in the seventh month of gestation; gave anodynes for her relief. She was confined to the bed for five or six months, and then slowly gained her usual health and a return of her natural menstrual flow, but no delivery of the fœtus or child took place.

In 1877, she became again pregnant, and at the seventh month was delivered of a dead child.

In July, 1879, while in a tree picking cherries, reaching for a limb, she felt something give way in her abdomen. This was followed by a slimy discharge from the rectum for three days, then by a profuse yellow purulent flow. From that time to the present, she has had periodic discharges of the same nature following a similar sensation. I saw her and made an examination per rectum, February 4, 1881. She consented to go before the medical class for an operation, but I received a note next day stating that she had changed her mind. I saw her soon after, but she refused to submit to any interference for relief. She afterwards, however, consented to any procedure that I might institute.

The examination revealed, about three inches from the external sphincter, a mass of denuded cranial bones. On another examination, about two weeks later. I was unable to reach them. March 3, she sent for me, stating that the bones had come down again so that she could feel them. March 4, under ether, I found the fœtal remains in a cul-de-sac lying in front of the rectum, behind the uterus, and easily felt through the vaginal walls. I hooked my finger in the mouth of the sac, pulled it down, and tilted it over, so that its opening was nearly in line with the intestines. The long and larger bones were removed with a long forceps, by getting their diameters perpendicular to the opening. The smaller bones were scooped out. Some two or three pieces were imbedded in the wall of the sac, but were dislodged by scraping. On the sixth day after, she said the sac was filling again, recognizing the fact by the failure of appetite which always accompanied it. March 13th, the tenth day, it discharged. Since then she has had a ravenous appetite, is able to walk with but little fatigue for two or three hours at one time, and is in a good general condition.

The Tendon Reflex in General Paralysis.

In a paper on the above subject, based on the study of eighty-two cases (seventy-one males and eleven females), which was read before the American Neurological Association, at its eleventh annual meeting in New York, June, 1881, by Dr. J. C. Shaw, Medical Superintendent, Kings County Lunatic Asylum, Flatbush, N. Y., and published in the *Archives of Medicine*, for August, the author stated that since the presentation of his first communication on the tendon reflex of the insane, in 1879, at which time he had only examined ten cases, the ideas he then presented, viz: that whenever the tendon reflex was absent we were justified in deciding that sclerosis of the posterior columns existed, and also that a light cortical sclerosis would abolish this reflex, have since been further confirmed.

In some of the cases in which the reflex was found exaggerated, and the cord subsequently examined microscopically, it was found that there was a sclerosis of light character almost everywhere, but most marked in the lateral columns, and the posterior columns near the posterior commissure also had a light sclerosis. From this he has been led to conclude that to abolish the reflex, the sclerosis of the posterior columns must be quite extensive, or there must be a marked cortical sclerosis, and the reflex thus find its point of obstruction in the posterior roots.

The exaggerated reflex is closely connected with two prominent symptoms in the disease. Those cases in which there are marked difficulties in speech, hesitancy, stuttering up to complete inability to speak (not aphasia proper), are the cases in which is always found, sooner or later, exaggerated tendon reflex.

And it is in those patients who have the marked difficulties in speech, and the exaggerated tendon reflex, that we find almost invariably hemi-paretic attacks, and comparatively rarely epileptiform attacks. There is, therefore, a direct connection between these difficulties in speech, the hemi-paretic attacks, and the exaggerated tendon reflex, and this is susceptible of pathological demonstration, and will be the subject of a communication from me at a future time.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Chas. S. Dalley, of Rochester, N. Y., has translated and published in pamphlet form, Dr. Ferdinand Cohn's valuable paper on Bacteria, the smallest of living organisms. There is room in this country for the publication of cheap monographs on scientific subjects, and we hope that the Doctor will continue what he has so well begun.

——We have received the announcement of the Wharton School of Finance and Economy, a new department of the University of Pennsylvania, also a paper reprinted from the *Penn Monthly*, for May, by Fairman Rogers, giving the history, plan, and purpose of the establishment of said school. Those interested may obtain further information by addressing Prof. R. E. Thompson, Dean of the Faculty, or Prof. J. G. R. McElroy, its Secretary, at the University.

——Dr. D. W. Prentiss, of Washington, D. C., sends us a pamphlet containing two papers, reprinted from the Philadelphia *Medical Times;* the one giving a full account of a remarkable change in the color of the hair from light blonde to black, in a patient while under treatment by pilocarpin, the case being one of pyelo-nephritis, with unusually prolonged anuria ; the other being a report of a case of membranous croup, treated by pilocarpin, in which there was also a slight change in the color of the hair.

——As a contribution to the differential diagnosis of abdominal tumors, Dr. A. F. Erich, of Baltimore, Md., read before the Clinical Society of Maryland, a paper on *Chronic Pelvic Abscess*, giving the history of three cases which had come under his own observation, in two of which fibroid tumor had been diagnosed, in the third ovarian cyst, previous to exploration. The treatment consisted in drawing off the pus, establishing drainage, and flooding the cavity with carbolic water in a continuous stream. Two of the cases recovered. The author also refers to other authors who have recorded similar cases.

——The following reports have also been received:—

Reports of the Board of Managers of the Pennsylvania Hospital to the contributors at their annual meeting, held May 2d, 1881, together with the accounts of the Treasurer and Steward.

Fifty-first Annual Report of the Board of Managers of the Philadelphia Lying-in Charity and Nurse School, being for the year 1880, with a list of officers, contributors, etc.

Sixteenth Annual Report of the Chicago Hospital for Women and Children, corner Paulina and West Adams streets, for the year ending March 7th, 1881.

BOOK NOTICES.

Deaf-mutism, and the Education of Deaf-Mutes by Lip-Reading and Articulation. By Dr. Arthur Hartmann, Berlin. With Nineteen Statistical Tables. Translated and Enlarged by James Patterson Cassels, M. D., Aural Surgeon to, and Lecturer on Aural Surgery at, the Glasgow Hospital and Dispensary for Diseases of the Ear, etc. 12mo, pp. 224. London: Baillière, Tindall & Cox, 1881.

The readers of the Reporter have been already informed of the publication of this important work, as a full list of the contents of the German edition, with a commendatory notice, was published in the June number, 1880. We are glad to have the work of Dr. Hartmann in an English dress, and our thanks are due the industrious and capable translator, for nothing but a true love of his department could have induced him to undertake so thankless a task, and one which will yield so little remuneration, either as a literary product or financially considered.

There has been no elaborate work published on deaf-mutism since that of Weissner (1856), while the work before us brings our knowledge of the subject, with all the most recent original researches and observations, up to the present day. In the first portion of the work the medical questions are chiefly discussed, and Dr. Hartmann, owing to his thorough knowledge of the ear and its diseases, is well qualified to perform this difficult task. In his preface, it is the hope of the author, that by describing the difficulties that have to be contended with, and the results which may be achieved by suitable medical advice and instruction, he should be able to awaken a more general interest in the education of the deaf and dumb ; their present state being by no means equal to their requirements. For even in Germany, the number of those who pass their life without having received a suitable education is very considerable. The same may be said of our own State, Pennsylvania ; we require more schools, both in the middle and western parts, as many children, owing to the want of means and no school facilities, are permitted to grow up in ignorance, in this age

and in this enlightened community. We have dwelt upon this subject, and have endeavored in our various publications to awaken an interest in the medical profession to the wants of these neglected deaf mutes both of our own State and the whole United States.

Chapters I and II are chiefly devoted to a definition of deaf-mutism in general, and special peculiarities of the deaf-mutes. Our author has made a very careful study of the inner life of the deaf-mute, and we fully agree with him when he states: "The feeling of weakness and dependence upon his fellow man, which is inherent in the deaf-mute, on account of his infirmity, makes him very modest in his manner; he is exceedingly grateful for every service rendered, and requites all favors shown him with an affectionate attachment." On the other hand, "it cannot, indeed, be disputed that there are also deaf-mutes whose character, leave much to be desired; but if shortcomings occur, they can always be traced back to a defective education," (p. 12). "It was found that those born deaf, as well as those who had become deaf, generally showed an equally good capacity, only among the latter it could be ascertained in a striking manner; that above one-half of those who had become deaf in consequence of cerebral diseases showed only a moderate or slight capacity." It is, therefore, the first principle in the tuition of the deaf and dumb that the deaf-mute should not only commit the subject to memory, but understand and comprehend it correctly before a new subject is taken in hand (p. 16).

While in the blind, the senses of hearing and of touch are especially developed, in the deaf it is principally the eye which, by a gift of keen observation, may sometimes compensate for the loss of hearing. Our author relates a number of such instances, and reports a case that happened to a professor of physiology, who, while visiting an institution for the instruction of deaf-mutes, was conducted through it by a female teacher without noticing during the conversation that she was a deaf-mute. A case somewhat similar occurred to Dr. Küssmaul, a patient, a young bookbinder, whom he conversed with in the hospital, and on taking down the history, learned to his astonishment, that he had before him an instructed deaf mute. Then he paid more particular attention, and found that he read all words quickly and surely from the Doctor's mouth, and that the only difference from an ordinary hearing individual was that his speech was hard, *i. e.*, that it had no musical sound, and no modulation. Several interesting cases are related, where deaf-mutes have been able to understand speech by means of the sense of touch, by placing the hand upon the cheek, another case upon the mouth, on repeating words against the back of the hand, and the other into the hollow of the two hands placed side by side upon the back. "If the deaf-mute understands a word which is spoken against a portion of the surface of his skin, he can only accomplish it by perceiving the several currents of air which are produced during speech, in varying succession and strength, and by being able to guess the word from them."

Chapter III is devoted to the recognition of deaf-mutism at the earliest period, which is stated to be noticeable at from the fourth to the sixth month. The relation of deaf-mutism to idiocy and aphasia is also discussed. Cases are described of pretended deaf-mutism, and various means for discovering simulated deaf mutism as the firing of a pistol, the use of opium to produce sleep, intoxication, the dropping a silver coin behind the back, etc., but no mention is made of a most efficient means employed in this country, namely, the use of anæsthetics. The physical and mental peculiarities of the idiotic mute are dwelt upon.

Chapter IV takes up the statistics of deaf-mutism, and the various systems for collecting special statistics, with forms of inquiry sheets. In the first table there are thirty seven inquiries. In the one adopted by the teachers of the deaf-mutes at the International Congress, in Paris, 1878, there were only seventeen. The Cologne inquiry sheet is simplified, and has twenty one questions. The number and mode as pursued in our own recent census reports of the United States, we have not been able to find out, although we have made several efforts to obtain them, but without success. Chapters V and VI gives the results of the general statistics as to sex occurrence among the different religious persuasions. All statistics agree that deaf-mutism is most frequently met with among the Jewish race. Then the results of special statistics regarding congenital and acquired deaf-mutism are dwelt upon, giving the age, causes, etc. Chapter VIII, the hearing power of deaf-mutes. Dr. Hartman examines the power of hearing by an ordinary dinner bell and large tuning fork, and records them under the following heads: 1. Totally deaf; 2. With hearing for the bell—hearing for sounds; 3. With hearing for vowel sounds; 3. With hearing for words. Chapter IX, the anatomical changes, as given in table 14, upon which deaf-mutism is based; but our author states that the changes in deaf-mutes is

unfortunately still too slight for general conclusions to be drawn regarding the pathological processes upon which deaf-mutism is based. We possess no post-mortem records of deaf-mutes who were the offspring of consanguineous marriages. Medical gentlemen who have official positions in deaf-mute institutions are bound in honor to do away with this great defect, and should make careful post-mortem examination, so as to prove or disprove the observation of Luys, viz., atrophy of the internal convolution of the posterior cerebral lobe. As the seat of the hearing function is in the cortex of the brain, in the temporal lobes, this region should be carefully examined. We now come to the most important chapter to the medical man—the curability of deaf-mutism. The infirmity of the deaf-mutes, or what is termed dumbness, can be removed by proper instruction. Means should and can be employed by which to arrest the development of hardness of hearing, or deafness. Von Trölsch and other eminent otologists believe that one fifth of the children can be improved by timely and energetic treatment, and should not become deaf mutes.

"Although great progress has been made during recent years in otology—a progress which compares well with that made in other branches—this specialty has not hitherto been accorded that position which is its due, either as regards its study or the compulsory examination of medical students. It is most desirable that students should be afforded the opportunity of studying otology, and that they should be compelled to prove at their (final) or government examination that they are, at least, familiar with the examination of the ear, and with the simplest methods of treatment. It can hardly be doubted that by this means the occurrence of many cases of deaf-mutism would be prevented." "But the duty of a medical man in an institution for the instruction of the deaf mute consists not only in treating now and then a few isolated cases; he must besides, ascertain the cause of the defect. The statements of parents, and how the deafness has been produced by this or that illness, are not sufficient." These are judicious counsels, and we trust they will be acted upon by those in charge of such cases. We have given forth the same ideas and published them in a recent work, showing we are in full accord with our author. The latter portion of the work is devoted to the subject of instruction of the deaf mute, with the numerous valuable statistical tables which will repay careful study.

In concluding our review of this work, we would state that our author has given the medical man and the instructor of the deaf mute, a most reliable guide, and one which is a credit to his reputation as an otologist, and the translator has done his work well, with the exception of a few words here and there which mar the elegance of the language, and a few typographical errors. L. T.

Essentials of the Principles and Practice of Medicine. A Handbook for Students and Practitioners. By Henry Hartshorne, A.M., M.D., lately Professor of Hygiene in the University of Pennsylvania, and Professor of Hygiene and Diseases of Children in the Woman's Medical College of Pennsylvania. Fifth edition, thoroughly revised and improved, with one hundred and forty illustrations. Philadelphia: Henry C. Lea's Sons & Co. 1881. Cloth, 8vo, pp. 669. Price $2.75.

At the present period of unprecedented activity in medical research, when hundreds of indefatigable workers are assiduously pushing their investigations into the origin and causes of diseases; when our methods of diagnosis are rapidly multiplying, and our therapeutical resources constantly increasing by the addition of new remedies to our materia medica, as well as by new applications of old ones, a work which embodies within the briefest space possible all the principles by which a practitioner should be governed in his treatment of disease, cannot but prove of inestimable value both to the student and physician. Fourteen years have elapsed since the publication of the first edition of Hartshorne's "Essentials," and still it remains the best book of its kind ever published. During the first seven years of its existence it passed through four successive editions, each thoroughly revised. To this, the fifth edition, numerous additions have been made, in the preparation of which the most recent contributions to medical literature have been consulted. Among the most important additions are those connected with the pathology of the nervous system and a section upon eyesight, its examination and correction, including color-blindness. The illustrations have been added to, and a number of new and carefully-selected formulæ have been introduced. An account is also given of the method of prescribing, according to the metrical system, with examples of metrical prescriptions, as well as a table of doses according to both systems; but throughout the work, and in the long list of formulæ appended, the author has, we think wisely, adhered to the old and familiar system of weights and measures.

THE

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POSITION OF HERAPEUTICS IN MEDICINE.

In reviewing the labors of the International Medical Congress, we adverted to the small amount of attention paid to what, after all, is the real business of the doctor—the treatment of disease. This seems to have been regarded as a very low view to take of that august assemblage, by one of our western brethren—him of the Cincinnati *Clinic*—who asks whether we wanted papers stuffed with prescriptions, and so on.

We are, however, by no means alone in making the criticism referred to. The cause for it lies so much on the surface, that we take no credit for originating it. The *Lancet* also felt called upon to comment in a similar vein, and as we are intimately convinced that its criticism is timely, and touches on a point needing reformation in modern medicine, we quote its words:—

One of the striking features of the work done at the last meeting of the Congress was the notable preponderance of attention bestowed on pathology and the clinical aspects of disease as compared with therapy. The contributions to a scientific knowledge of bodily and mental affections were many and of great value, but they nearly all tended to throw light on disease and to make its course and causes clearer, without in any sensible degree enhancing the probabilities, or increasing the stock of remedies or methods of cure. This is to be regretted; but it marks the stage of progress in science, and is in strict accord with the fashion of the hour and the prevailing habits of thought among physicians. Hereafter there may dawn on the profession a day in which therapeutics shall engage the largest share of its attention; but at present it is preoccupied with the study of disease and the exploration of the mysteries of the morbid state. Perhaps it would be better if there were less skepticism in medicine, at least such unbelief as consists in a growing lack of faith in drugs. It is not pleasant to hear of physicians leaving everything to Nature, as regards recovery, and concentrating their powers of scientific observation and research almost exclusively on the development of disease, rather than on its arrest by active treatment and powerful remedies. It is becoming too much the custom to stand by while *vis medicatrix naturæ*—whatever that may be—struggles with the disease. Granted that the meddlesome art of a century, or even half a century ago did more harm than good, that is no sufficient reason why we should abandon the hope of beneficial treatment, and content ourselves by sagely looking on. The neglect of therapy is a sin of omission which ought to be discountenaced and forsaken in the interests of the great art of which it is the pivot and the purpose.

These are sound and strong words, and deserve to be taken home by most investigators of today. It is simply discreditable to see and hear the therapeutics taught and practiced in some foreign hospitals, especially in Germany. It is a result of the nihilism of Skoda, and the dominant attention to diagnosis and pathological anatomy, which of late years has reigned supreme in that country. This was long the case in France also, but at present is less so than formerly. It is gratifying to note that such a sterling journal as the *Bulletin de Thérapeutique* recently celebrated its semi-centenial. The first number was published by Dr. MIQUEL, July 15, 1831, and although the attempt seemed then a bold one, it was at once crowned with success. In the struggle which followed the fall of the doctrines of BROUSSAIS, pathological anatomy reigned supreme, and it became necessary to affirm that the great end of medicine was the cure of diseases. This was what MIQUEL did by founding a journal exclusively devoted to therapeutics, in which might be received, accumulated, and coördinated, all the facts bearing upon the treatment of

medical and surgical diseases, enabling them by this publicity to be submitted to renewed investigations. Dr. MIQUEL dying sixteen years afterward, his work was successfully carried on by DEBOUT, BRICHETEAU, GAUCHET, DOLBEAU, and the present editors, who exclaim, "It is not without a deep sense of pride that we contemplate this unique collection of a hundred volumes, wherein are found all the facts observed relating to medical and surgical therapeutics during fifty years, whether in France or abroad, accumulated under such different directors, without their ever departing for an instant from the line of probity and honor traced by the founder."

The *Bulletin* has always aimed to present practical, positive therapeutics, not an anxiety to run after every new drug and alleged cure which came into the market, but the real and well ascertained progress of the healing art. Its pages are not stuffed with prescriptions—though it does not make a merit of excluding them, as many contemporary writers do—but it concerns itself with the practical business of the physician in preference to publishing ingenious and generally erroneous theories.

Was there a fair proportion of such articles read before the International Congress? There was not, and we do not hesitate to say that it depreciates from its credit that this deficiency is manifest. It indicates that the science of medicine has not yet reached the period of utility and service to man, which is its ideal condition; and the hesitancy to recognize this on the part of some, is even a more regretable symptom of the same incompleteness.

NOTES AND COMMENTS.

Recovery after Fracture of the Base of the Skull.

An interesting case is reported in the St. Louis *Courier of Medicine*, for August, 1881, by Dr. H. S. Chubbuck, of Elmira, N. Y. A boy aged 4 years and 2 months, was thrown from a high seated wagon, about 9.30 A.M., Aug. 11th, 1880, while the horses were rounding a corner at full speed, striking upon the upper part of the left temporal region. He was unconscious until about noon, when he opened his eyes and seemed to know his friends. He vomited several times. He was first seen by the Doctor at 3.45 P.M., when the blood was flowing profusely from the left ear; pulse small, not counted, probably about one hundred; pupils contracted. The next day he was delirious; hemorrhage from the ear lessened, and finally ceased towards evening.

August 13th, the following day, a colorless discharge appeared; bowels freely opened. The next three or four days showed little change. The little patient was restless and seemed comatose; pulse 106 to 120 per minute; respirations 30 to 36; pupils normal; temperature about normal. The discharge from the ear ceased the evening of August 14th. On August 16th he was rational when roused: pupils normal; pulse 90; temperature 97.6°; respirations 30; sleeps most of the time. The next day he became rational and called for food. Temperature was sometimes a little elevated, but usually normal. By the 21st he was looking better, sleeping quietly, and a good deal, and lay with eyes closed when awake; took milk freely, but no solid food; pulse from 90 to 120. For the next few days there was little change except that he grew weaker. Head had been somewhat drawn back. On September 3d he became again somewhat delirious. He gradually grew worse, so that on September 5th he was more feeble; appetite gone; pupils dilated; temperature higher; pulse 140; respirations 40. The rise of temperature was temporary, returning to normal in a day or two. He remained practically unchanged until September 9th, when all the symptoms were improved, but the mental condition was quite unsatisfactory; pulse 102; respirations 28; temperature 98°. He grew weaker, so that the pulse could hardly be counted; yet it was slow, being only 90. Head was still retracted; at one time pulse fell to 76, and respirations to 20. By the 22d a slight improvement was noticed. Thence his improvement was slow but sure, so that on October 1st the record is "all symptoms improving, and he bids fair to recover; he sleeps and eats well; pulse 86; respirations 30." Two days later he ate in the dining room with the family. Ten days later he was apparently well, yet rather weak. There is no paralysis of the facial nerve, but a partial deafness of the left ear.

Skepticism in Medicine.

Skepticism in Modern Medicine was the text of Dr. Maurice Raynaud's address to the International Congress. One of his paragraphs is so impressive that we transcribe it:—

"The true and most powerful cause of skepti-

cism, that which has in all times, ancient and modern, made so many skeptics among us, is that medicine, at the same time that it is a science, is also a profession. We do not complain of this, which is one of its glories—the highest, perhaps; for by it is given satisfaction to all that is most generous and most elevated in the human heart, the desire to come to the aid of those who suffer. But it is an onerous glory. The profession outweighs the science; and the latter, whatever it may do, will always fall far short of the exactions of the former. Men, for the most part, care little for the progress of science; but when they are ill they wish to be cured, and that is why they come to us. Now, for every practitioner having a consciousness of the dignity of his art, there is a painful feeling due to his powerlessness in the presence of so many ills. What a contrast is there between the immensity of the services which are expected of us, and those which we are really able to render! How are we to justify the excess of confidence of so many patients? We must, in spite of all, act and strive. Science is incomplete, as it always will be. No matter; we must do our best. This, we must admit, is a pernicious habitude for the scientific mind to acquire. By it we accustom ourselves to act by chance, in the dark, or we fall into illusions as to what we know and what we are ignorant of. In face of this alternative, certain absolute minds, little disposed to temporizing, fall back upon doubt and inaction, consoling themselves with this argument—that to be ignorant is to be powerless."

Organic Life on Meteorites.

The *Popular Science Monthly* states, that in meteoric stones, and especially in the class called chrondrites, on account of the peculiar spherical inclosures found in them, the eminent German geologist, Dr. Hahn, has recently discovered an entire series of organic remains. By a laborious process of grinding down and polishing these fragments, he succeeded in producing a large number of thin laminæ or delicate stone shavings, which he subjected to a careful series of investigations under the most powerful microscopes. He has recently published a book on this subject, containing on thirty-two plates more than one hundred representations of these laminæ of meteorites, every one of which contains different forms and figures, which Dr. Hahn positively identifies, *not as mineralogical* but as *organic*, and, in fact, *as zoölogical formations* belonging to the different classes of *sponges*, *corals*, and *crinoids*. These pictures, which have been reproduced from the original laminæ by photography, without any alterations or additions by a draughtsman, must cause great surprise to every geologist and paleontologist, who will at once recognize the structure of well-known coral types on several of the plates. The majority of the meteorites containing these forms are part of the celebrated great meteoric fall of Knyahinya in Hungary, which took place on the 9th of June, 1866.

Congenital Luxations of the Femur.

Dr. Pravaz, in the *Lyon Médical*, for July, 1881, quoted in the Glasgow *Medical Journal*, discusses this interesting question from a hitherto neglected standpoint. During six years, from 1863 to 1878 inclusive, he recorded a hundred and twenty-five cases of congenital luxations of the femur. Of this number he noted, in a hundred and seven, the sex of the subject, the simplicity or complexity of the affection, and the side of the luxation. He states the results as follows:—

	Double.	Right.	Left.	Total.
Male,	7	1	3	11
Female,	44	28	24	96
	51	29	27	107

From this it will be seen that the female sex offers an enormous proportion compared to the male; that the luxations of the one side do not markedly preponderate over those of the other; and lastly, that the number of double luxations is equal to the unilateral.

He concludes that these luxations are due to many causes, and is of opinion that it is to the comparative shallowness of the acetabulum in the female sex that the greater liability to displacement of the femur in females is due.

Removal of the Uterus for Cancer.

The *Presse Médicale Belge*, of September 18th, has an article strongly deprecatory of the present mania for the performance of this operation, leading to its being undertaken when the diagnosis is uncertain, and the probability of ultimate cure hopeless. The writer furnishes references to eighty-one cases, with their results, which have been performed since Freund's typical operation in 1878. Of these cases, fifty-eight are recorded as fatal, to say nothing of unfinished operations and relapses. "In the presence of such results, is not our opposition to so grave an operation for uterine cancer amply justified? Two objections will be taken. It

will be said, 'But there are some cures.' If we accept as definitive cures temporary recoveries, this may be so; but even here, who will answer for it that it was really cancer for which the operation was performed? If we require more than mere affirmation, we can only accept with doubt this word 'cure,' with its numerous reticences. Secondly, it may be affirmed that in many cases the patients have not died from the consequences of the operation. We reply that diseases coexisting with cancer of the uterus were evidently a contraindication to the operation, and a reason the more for not resorting to it."

Hypodermic Injections of Fowler's Solution in the Treatment of Chorea.

This method of treatment has proved very efficacious in the hands of Dr. Edward C. Mann, of New York, who, in the July number of the *Alienist and Neurologist*, publishes an article on the nature, pathology and treatment of this affection. In order to avoid any local irritation he uses a mixture of equal parts of Fowler's solution and water. Very rapid improvement generally takes place under this treatment from the first, and the patients gain flesh. He commences with three minims, and injects, subcutaneously, for a week, every other day, and on the second week increases the dose to five minims every other day, increasing two minims each week, and in from one to two months a cure is obtained. In recent cases a month or six weeks will generally suffice, while in old cases sixty or seventy days may elapse before a cure is accomplished. In troublesome cases he also uses, as adjuvants, ether spray or ice bags to the spine, and electricity. By this method of using Fowler's solution the gastric disturbances which are produced when the medicine is given by the stomach are avoided, and the good effects which we can obtain are very much more rapid.

Steam Fans in a Hospital.

In a large hospital at Madras, fans (punkhas) are operated by steam. The machinery, says the *Scientific American*, is simple, the hundred fans presenting an area of 2050 square feet, being swung by a line of steel wire about 1700 feet in length. The fans swing together with a steady sweep of seven or eight feet, and work smoothly and silently. It would be a great blessing if similar apparatus, together with other means for refrigeration which are in common use throughout India, were introduced into our hospitals and made use of during the hot season. The expense would be trifling compared with the comfort to the patients and probable saving of life.

New Treatment for Vaginitis.

M. Terrillon proposes a method of treatment which consists essentially in the introduction into the vagina of the following ointment:—

℞.	Ac. tannic,	50 grams.	
	Amyli,	150 grams.	
	Ung. petrolei,	150 grams.	M.

This ointment is placed in a sort of speculum, so arranged that the ointment can be forced out as the instrument is withdrawn from the vagina. If the vulvar opening is large a small tampon of cotton may be introduced.

Generally from fifteen to twenty grams of the unguent is sufficient at one application, and it need not be repeated for seven or eight days.

Treatment of Cystinuria.

Cantani, in a work on the pathology and treatment of disorders of secretion, published in Berlin, claims to have demonstrated the possibility of curing cystinuria by regulation of diet, on the same principle as in diabetes, oxaluria, uric acid diathesis, gout, rickets, etc. He recommends exclusively albuminous diet, with green vegetables, and aerated waters to prevent formation of calculi, and the use of balsams and resins to relieve the usual catarrhal condition of the urinary passages. He permanently cured a case by ten days' treatment with animal diet, prohibition of milk, farinaceous food, fruits and sweets, with abundant water, alkalies, and oil of turpentine.

Chlorate of Potash in Benign Epithelioma of the Face.

Dr. Lèvêque, in a thesis, quoted in the Glasgow *Medical Journal*, gives the following description of "benign" epithelioma:—It is a slight local affection, appearing usually in patients of advanced age; of glandular (sudoriparous) or papillary origin; it is first noticed as a tubercle or wart, surrounded by a fibroid or fibrous membrane, in which it lies encysted. At the end of a variable period, lasting from two to thirty years, it presents a depressed or excavated ulceration, which exposes the whole lesion. There is no glandular enlargement, at least for many years.

The radical cure is possible during the whole period of encystment; but when the epithelial proliferation, passing beyond the fibrous barrier which enclosed it, invades the skin, the case takes on a graver aspect, and the chlorate of

potash must give place to the knife. The treatment of benign epithelioma may be managed in the following way: The ulcerated part must be touched as frequently as possible with a ten per cent. solution of chlorate of potash in glycerine, and covered with lint smeared with simple ointment. Treatment may last three months, but improvement is manifest at the end of two weeks. If at the end of three weeks there be no marked amelioration, the knife must be resorted to.

Special Reports.

NO. XVIII.—TUBERCULOSIS.

(*Concluded from p.* 502.)

COUNTER-IRRITATION IN TUBERCULOSIS.

This therapeutical measure, Professor Peter (*Le Concours Med.*) thinks, is not sufficiently relied upon, and he gives a series of directions on the subject.

If the patient is still in fairly good health he may be cupped, or leeches may even be applied to the thorax over those points where signs of pulmonary congestion are perceptible. In those cases in which the patient is weak, dry cupping, mustard plasters, or flying blisters may be ordered, while the apices are painted with tincture of iodine. Croton oil, thapsia, antimoniated plasters, and Burgundy pitch should always be avoided, as they leave indelible stains. If the lesions are more deeply seated, an oval blister should be made by Vienna caustic, applied over the second or third intercostal space, one or two centimeters from the free edge of the sternum. When the patient does not object to its use, a second may be applied before the previous one has healed, in order to keep up the counter-irritation. Lastly, a useful form of cauterization is that obtained by the use of a triangle of red-hot needles applied very superficially. This application should be repeated every five days beneath one or other clavicle, the needles numbering twenty to thirty.

OLEAGINOUS REMEDIES.

Among the various oils that have been tried, that from the cod-liver still stands preëminent. In young children and some patients of adult age it is not free from objections, many practitioners agreeing with a recent conclusion of the Conseil d'Hygiène du Département de la Seine: "The ingestion by young infants of different substances, and especially of cod-liver oil, may induce dangerous diarrhœa." In support of this proposal, Dr. Ricklin calls attention (*Gaz. Méd.*, June 11th), to the aid that may be derived from physiology in explaining many of the deaths of young infants, and in this case by showing the impropriety of administering any fatty substances at this early age.

Iodized Cod liver Oil.—It has been found that the addition of iodoform and essence of aniseed will mask the unpleasant odor of cod-liver oil. M. Fonssagrives (*Arch. Méd. Belges*, January, 1881), uses the following mixture: one hundred grams of cod-liver oil to one-fourth of a gram of iodoform; to this twenty-five drops of essential oil of aniseed are added. In this simple way the taste and odor of the oil are masked. Moreover, the iodoform is generally a serviceable adjuvant in cases where the oil is indicated.

Oolachan Oil.—Not long ago, dugong oil was introduced as a rival to cod-liver oil, and now a new claimant has appeared under the name of 'oolachan oil' (*Pharm. Jour.*, April 30th, 1881). At ordinary temperatures it appears to have a consistence between that of dugong and cod-liver oils, and a taste that is perhaps slightly more agreeable than either. The oolachan fish is about the size of a herring, and is met with on the coast of British Columbia and Vancouver's Island. It is so full of oil as to be known as the candle fish, for, when dried, it can be used as a torch.

Chaulmoogra Oil.—Dr. Murrell (*Brit. Med. Jour.*, November, 1880, p. 844), has used the chaulmoogra oil in fifty-nine cases of phthisis. In thirty-one cases, three drops were given three or four times a day, in milk, the dose being gradually increased, week by week, to as much as could be borne. Ten minims was about the limit. Twenty-four of the cases improved under treatment. In twenty-three cases, the oil was used by inunction, two to four ounces being rubbed into the chest weekly; this plan yielded the best results.

Linseed Oil has been recommended by Dr. Blackerly (*Therapeutic Gazette*, April, 1881).

THE DIARRHŒA OF PHTHISIS.

The pathology and treatment of this complication has been carefully set forth by Dr. C. Theodore Williams in the *Lancet*, June 18, 1881. The most fatal form of it is that from tubercular ulceration of the intestines:—

The pathology of tubercular ulceration requires a large number of specimens to display its exact course, most autopsies only showing the last destructive stages.

Ulcers are to be found occasionally in nearly the whole intestinal tract below the duodenum, but they are so extensive and involve so great an amount of the mucous membrane of the large intestine as often to give it an entirely worm-eaten appearance, and in many instances the large intestine of a case of phthisical diarrhœa cannot be distinguished from that of tropical dysentery.

Death from this cause usually arises from perforation of the intestine and consequent hemor-

rhage or peritonitis. Dr. WILLIAMS' recommendations for the treatment of this dangerous complication have already been given in this Journal. (See MEDICAL AND SURGICAL REPORTER, vol. xlv, p. 127.)

The treatment of the diarrhœa as practiced by Dr. HEUBNER (*Ærztl. Verbl*, Mai, 1881) is to give the *oxide of zinc* in large doses, forty-five to sixty grains daily, the albuminate of tannin (tannic acid in water containing the white of egg) and the continued use of hypodermic injections of morphia.

TREATMENT OF HÆMOPTYSIS.

In the University clinic, at Charkow, it has been found that the tincture of the seeds of *Carduus Mariæ* has the best effect in spitting of blood. It has been used for more than a year and a half, and has succeeded in many cases where ordinary remedies failed. The dose is from 40 drops to a teaspoonful, repeated several times (*Allg. Med. Cent. Zeit*, July 9, 1881).

Dr. TAACKE, of Berlin (*Berl. Klin. Wochen.*, No. 6, 1881), having injected sulphate of atropia subcutaneously for eczema in a female patient ($\frac{1}{200}$ grain twice daily in distilled water for two days) noted that the menses, which had been very profuse, became moderate, and remained so. The same result he has seen follow five times in two other patients, and in a case of hemorrhage from the lungs the hemorrhage twice ceased immediately on the injection.

TREATMENT OF NIGHT SWEATS.

HEUBNER (*ubi supra*) recommends the following:—

℞. Acidi salicyl., gr. xv
Amyli, gr. xxx
Talci, ad ℥j. M.

SIG.—To be powdered on the skin or lightly rubbed in.

Several writers in the recent English journals unite in the opinion that probably the best remedy for profuse night-sweating is *picrotoxine*, the alkaloid of cocculus indicus. The dose is one-sixtieth of a grain, and it should be made into small pills, one to be taken at bedtime, and another in the early morning. A full account of picrotoxine and its properties will be found in the *British Medical Journal*, January 17th, 1880.

THE COUGH OF PHTHISIS.

In a paper read before the Medical Society of London, last winter, Dr. T. LAUDER BRUNTON said that the cough may be excited by direct or reflex irritation of any branch of the vagus, and treatment consists in allaying or removing this irritation. Glutinous and saccharine substances in the mouth are well known agents, acting, probably, by soothing irritation existing at the root of the tongue and around the fauces; and, therefore, these factors being removed, the irritation of parts deeper than those affected by the remedies is lessened. The remedies themselves shield the irritated mucous membrane, or excite a flow of saliva and mucus, or possibly possess other remedial powers of which we are at present ignorant. A linctus, containing morphia or opium, has a distinctly sedative action on the peripheral nerves. In laryngeal phthisis, the cough is best treated by blowing through a glass tube, at the moment of inspiration, the following:

℞. Morphia sulphatis, gr. $\frac{1}{6}$
Amyli pulv., gr. ij.

Opium by the stomach is effective, but is apt to disturb digestion. A combination not so apt to do this is—

℞. Sol. morph. mur.,
Acid hydrocyan. dilute, āā, ♏xviij
Spir. chloroformi,
Acid nitric dilute, āā ℥j
Glycerinæ, ℥iij
Infus. cascarillæ, ℥ij. M.

A sixth part to be taken three or four times a day.

He further observes, that to diminish congestion, *potash* has a marked effect. This is well seen in a lung suffering from consolidation and softening over a limited area. In ordinary health, crepitant *râles* will be heard limited to one spot. Should the patient catch cold, dry *râles*, extending for some distance round the irritated spot, will be heard, and the cough becomes troublesome, with very little expectoration. If potash be now given, especially the citrate, in a day or two the dry are replaced by moist *râles*, and the expectoration becomes freer, the cough at the same time subsiding. Now is the time to substitute for the potash another agent having a marked influence on the lungs, viz., *nitric acid*. If it be given too soon, the cough will again become harsh and dry; but, if the correct moment be chosen, then the cough yields and the expectoration diminishes. Potash, then, has a very marked influence in rendering the pulmonary secretion more fluid and abundant, while nitric acid has an opposite effect. A most powerful expectorant is a little warm food; and the comfort derived by chronic bronchitic patients from a cup of warm milk and a little biscuit or bread a quarter of an hour before rising, is most marked.

A writer in the London *Medical Record*, June 15th, 1881, says that for the slight cough, which

often remains for years after consumption is practically cured, the following receipt will be found useful:—

Linseed Jelly.—Half a pound of linseed (the brown seed) to three pints of cold water. Let it simmer (not boil) for two hours, then strain, or rather squeeze through muslin. When cold it will be in a jelly mass; sweeten and flavor to taste. A breakfast-cup of the jelly once a day, or oftener if necessary, with the juice of one lemon in it.

M. Ordylowski (*Gazette des Hôpitaux*) draws attention to the value of chloral in the cough of phthisis. His observations included fifteen cases, of which only two did not have cavities. The drug was given in capsules, in doses of fifteen to thirty grains at bedtime; and the patients then drank a glass of water. No bad symptom was noticed in any of the cases. The sleep was peaceable, the physical symptoms were less distressing in the morning, and the patients felt better and stronger, and never complained of headache. Whenever the chloral was discontinued the cough and insomnia reappeared.

Correspondence.

The Physician as a Dispenser.

Ed. Med. and Surg. Reporter:—

[After stating that the various plans suggested to unite the interests of physicians and pharmacists had not succeeded very well, the writer recommends physicians to dispense their own drugs, and describes the method he himself pursues in the following words:]

In the first place, the physician does not, in general, need a large variety or supply of medicines. The confession of the older physicians will be found to be, that the longer a practitioner is in practice, the fewer medicines will he find it necessary to use. The young physician is apt to view the Materia Medica in the light that he must use every drug it contains. But a few drugs, skillfully and properly given, is a plan both wise and fraught with success.

Again, large doses of medicine are fast giving way to smaller doses, given more frequently. Thus we have had within the past few years a wonderful change in the matter of calomel. Formerly ten grains was considered a fair and necessary dose for an adult. Now we get a better effect from one-third or one-half a grain, given with sodium bicarbonate, repeated every hour until about three grains are taken. Other and numerous examples could be furnished; but this will suffice to explain and illustrate the principle.

Bearing these facts in mind, the writer found it practicable, when he began practicing, to carry in a satchel a great number of the medicines needed in the treatment of the general run of diseases. A "pocket-case" was procured, containing a number of two-drachm tincture and three-drachm powder bottles. In the tincture bottles were placed such tinctures as those of digitalis, nux vomica, aconite, veratrum viride, opium, catechu, kino, krameria, rhubarb, paregoric, etc.; in the others, were placed a mixture for dysentery, etc., aromatic spirits of ammonia, fluid extract of ergot, fluid extract of rhubarb and senna, etc. The powder bottles were filled with pepsin, bismuth, Dover's powder, ingluvin, podophyllin, potassium citrate, potassium bromide, potassium iodide, ammonium chloride, cinchonia sulphate, the powdered solid extracts, such as of gentian and other drugs.

With these it was found possible to treat the greater number of complaints with which the writer came in contact. Thus, if called to see a patient having a fever, the plan was to ask for two tumblers, one with, and the other without water, and a spoon. Measuring so many spoonfuls of water into the empty tumbler, it was easy to calculate the quantity of medicine necessary to place in the water that each teaspoonful should contain the required dose. Then putting in the tumbler the proper amount of tincture of digitalis, or tincture of veratrum viride, or tincture of aconite, with or without potassium bromide, potassium citrate, tincture of opium or paregoric, as the case may need, a fever mixture resulted at a cost of about two pennies. A card, with the directions written plainly thereon, laid alongside the tumbler, upon which a book should be laid, finished the pharmaceutical work—the whole occupying but a short while to accomplish, and requiring the expenditure of very little effort. If the needed medicines are not at hand, a messenger dispatched to the office at a certain hour will secure them.

This plan has been found to work admirably. Patients found it novel, indeed, but they liked it, and gave the writer more patronage than he otherwise could have secured. They got their full dose of medicine, and at a cost of a few cents.

But it was soon found that something larger and more convenient was needed than the "pocket case." It was necessary to carry other medicines than those mentioned, such as Monsel's solution and powder, sugar, the syrup and powder of ipecac, powdered alum, cubebs, etc. A satchel was therefore procured, and in this it has been found convenient and possible to carry nearly every medicine that is needed in practice. The best form of satchel is that adopted by the homœopath, in which the bottles are fastened on leaves, and are thus not likely to spill their contents.

In this manner, the writer carries nearly all his medicines, and in sufficient quantities, that he requires in his practice. Concentrated forms are used in all cases where possible, and a great preference is shown for powdered solid extracts, resinoids and active principles. Rubbed up with a certain amount of sugar of milk, or, with what answers just as well and is far cheaper, pulverized sugar, these powders are in a very pleasant and effective condition for administration. In this way iron, either the subcarbonate or the reduced, nux vomica, potassium bromide and iodide, arsenic, strychnia, and others, are constantly prescribed. The trituration should be thorough, and the proportions carefully made.

It is rare, indeed, that the writer is obliged to give a prescription. If he does, he orders that it shall be taken to his office to be filled. Where practicable, the crude drugs are purchased, and the various preparations made from these. Very little time is absolutely required in their manufacture. The cost is slight, for drugs can be procured at the same prices as paid by the pharmacists; though some difficulty was experienced at first in finding a wholesale house who would sell to physicians at reasonable rates. A house has been found, however, who furnishes first-class goods at wholesale rates.

The limits of this article will not permit any more minutia in this respect. Many ideas suggest themselves. Some have been mentioned in papers or published by others elsewhere. But mention must be made as to the office of the physician desiring to carry and furnish his own medicines. The office can be furnished with all the appliances of the druggist, such as scales, weights, mortars, funnels, bottles, corks, printed labels, mucilage for the latter, string, prescription file, powder papers, and envelopes, pill boxes, ointment boxes or jars, and the other requisites of a drug shop. Very little time is consumed in putting up medicines. Shelves, or an old bookcase, placed in one corner of a room, will answer for furniture. Professional dignity and knowledge are not lowered in the least, but, on the contrary, they are raised and increased. The patient places more reliance upon the physician, and the latter is confident of the streng h and quality of his medicines.

The plan is worthy of adoption by every physician, as in it we have a remedy for the evils from which physicians suffer at the hands of pharmacists. The Medico legal Society favors it, and its speedy adoption among many of the younger physicians just graduated, and by many who have been in practice for years, is a matter of certainty.

The Medico-legal Society desired, before broaching any such plan, to try that of a mutual agreement between themselves and pharmacists, but the effort failed, though the Society worked in good faith and with good intention. Their zeal was in a good direction, but, unfortunately, ended in signal failure.

It is urged upon physicians to take a thorough view of the field, to study the forces they have to contend with, and adopt such a corrective as will put the medical profession upon a more certain basis. Let them send no prescriptions to the druggist who sells patent medicines, and prescribes over his counter. It *is* the business of the doctor, as to where the patient procures his medicines. He *is concerned* in having medicines properly put up, and by a man conducting his business legitimately.

By carrying his own medicines, the physician will do much to break down the evil which is fast crippling his profession. But, let every physician be sure that he is correct himself in all respects. The confession is made that the medical profession has, in some things, given cause for criticism. The writer knows of a physician who, upon entering the store of a certain druggist dubs the latter *Doctor*. There is something *sweet* in this, and it suggests that the M.D. is after customers. But let the bad practices of physicians be corrected, and those of a better order instituted, and there will then indeed be a healthy reform accomplished.

G. Maxwell Christine, M.D.
1105 *Diamond St., Philadelphia.*

Cauliflower Excrescence; Ligation; Recovery.

Ed. Med. and Surg. Reporter:—

The history of the following case seems to me worth reporting for your readers, who may have to contend with this formidable disease:—

March 12th, 18—, I was consulted by Mr. T. about his wife, who became pregnant about the middle of the previous August, and lost more or less blood ever since, and her suffering was now so great that she must die unless she received immediate relief. The case being nine miles from my office, and apprehending placenta prævia, I requested that his family physician, who lived within a half mile of the place, give close attention to the case with me.

March 13th I met Dr. D. at the house of our patient, who was aged 36 years; mother of six children; married eighteen years; healthy until after her last confinement, since which time she suffered from weakness in her back, and since Sept. 15th, a bloody discharge from vagina, which, from the beginning was highly offensive, and varied in color, from an ash and yellow to a real bloody hue. This discharge was always more or less sanguinous. During the last month her pain and suffering were so great that she preferred death to a continuance of this condition. A speculum examination revealed extensive ulceration and disease of the os uteri, considerable functional disturbance of this organ, some dilatation, slight contraction, and, withal, sufficient dilatability to enable me to promise our patient a safe delivery at this stage of the disease. I was in favor of bringing about labor at once and deliver; but my friend Dr. D. opposed this view of this case, believing she might carry to full term and save the child. I was sure, from the dilatation present, and the slight contractions coming on, she would soon get relief. We cleansed the vagina with a disinfectant wash, alleviated her suffering with opiates, and prescribed a tonic course of treatment.

March 14th. I found our patient gave spontaneous birth to a child during the night, before the services of Dr. D. could be procured. Child lived one hour. Placenta healthy; patient comfortable; lochial discharge very free.

March 23d. Patient comfortable, but discharge still very free. We directed a continuance of disinfectant washes.

March 30th. A speculum examination revealed a pale, vascular, rough, granulated tumor springing from the mouth of the womb, which would bleed upon the slightest touch. We applied a strong solution of the nitrate of silver to this abnormal surface, and continued the general tonic treatment and disinfectant washes.

April 13th. Volume of tumor increasing, but general health of patient improving.

April 27th. Vagina rapidly filling up with malignant tumor.

May 4th. Vagina nearly filled with this morbid mass, yet patient comfortable and stronger, being out of bed a portion of each day. Pulse 110. Temperature 99½.

May 11th. General conditions the same. Tumor rapidly distending the walls of the vagina and creating discomfort from distention and functional disturbance of the bladder and bowels.

May 28th. Tumor the size of a child's head and protruding slightly from the body. I informed Dr. D. of my intention of radically removing the tumor by including the neck of the womb. He opposed the operation very decidedly, but agreed to submit my decision to the patient and abide by her decision in the matter. Her condition being carefully explained to her, she promptly agreed to submit to the operation. We appointed June 1st for our operation.

May 31st. We found her cheerful, she remarked that the last week was one of very little suffering.

June 1st. I went to the house prepared in every respect to perform a radical operation, having in the meantime talked over the different and best methods of operation with my distinguished friend Dr. Goodell, of Philadelphia. I found our patient sitting up and cheerful. I invited some four or five of the physicians of the neighboring town to be present. They all made an examination of the patient and tumor, and protested against the radical operation, declaring she would sink under the operation. We compromised on ligation, strangulation and removal of the tumor by ligature. This was accordingly done.

June 2d. Our patient rested well under the influence of a full anodyne, and we found her condition good; suffering very little pain. I drew the ligature tighter and left her cheerful and hopeful.

June 3d. The ligature was again drawn, and she was suffering considerable uneasiness. I prescribed twenty grains of hydrate of chloral. She was unable to void her urine, which was drawn with the catheter.

June 4th. We found her comfortable, having rested well under the influence of the chloral, and is well nourished with beef tea and milk. She is also taking some stimulants. The catheter was again used and the ligature drawn tighter.

June 5th. Patient weak and anxious; catheter again used, and general treatment continued.

June 6th, 9 A.M. We found her suffering a good deal; opiates alternated with chloral. Appetite gone; bowels have been kept open with enemas.

11 P.M. Very uncomfortable.

June 7th. I remained all night with our patient, and made her as comfortable as possible. This morning there is considerable breaking down of the tumor, which is passing in large quantities. Disinfectant washes used freely.

June 8th, 8 A.M. We found her comfortable and cheerful, with a retaining appetite. The tumor is continuing to break down and pass away.

June 9th. We found our patient continuing to improve, and we had intended to remove the cannula, but found it still firmly attached to remaining shreds of the tumor at its origin. We concluded to let it remain a few days longer. It is drawn high into the pelvis and almost within the uterus, which has receded to near its normal position, the tumor having pulled it down by its weight. One singular feature of this case was the fact of this patient having a constant and violent cough, until the ligature was placed around the tumor, when it suddenly ceased. She is improving in strength, and her pulse is now 100 per minute; tongue cleaning, appetite improving, and she is quite cheerful and feels that she has a new lease of life, however brief it may be.

June 11th. I removed the cannula, which brought with it some little fibrous structure. She continues cheerful and comfortable. The quinine and iron are continued, and she drinks some ale.

June 14th. We found her sitting up in her bed and feeling well; all discharge per vagina having ceased—no smell nor fetor. The upper part of the vagina and uterus feel hard, but are not painful to the touch. She was able to pass her urine since the 11th inst.

June 24th. We found our patient up and superintending her household duties, free from discharge, pain and suffering, and her general condition improving. She continues injections of chlorate of potass. and Labarraque's solution, and is careful to keep the parts thoroughly cleansed.

July 1st. We discharged her, but could not promise how long she would remain exempt from a return of this terrible malignant growth. Though apparently enjoying good health she will certainly have a return of the disease, while a more radical operation, such as I proposed, might possibly have prolonged her life for years.

Ashwell on "Diseases of Females," p. 312, in speaking of the cauliflower excrescence of the uterus says, "It has been objected to the more radical means, that they are only temporarily beneficial, and that the ligature and caustic may provoke irritation and thus lead to the more rapid reproduction of the malady. Such conditioned and doubtful consequences ought not to have weight. Without decided treatment life cannot be long preserved; and there are many examples now on record, proving that years, and these with comfort and modified enjoyment, may by such means be secured." On page 295, he says, under the head of "Excision of the Neck of the Uterus," Professor Simpson, of Edinburgh, has lately published an extremely interesting case. The patient not only quickly recovered, but Dr. Lewins, of Leith, who attended her in her subsequent confinement remarks, "that it is certain that conception took place within ten days from the date of the operation." On page 296, he says, "Dr. Ingleby once excised the cervix for a malignant fungus, which did not extend above the os uteri more than a quarter of an inch. The patient who was almost moribund prior to the operation, became apparently quite well, actually got fat and remained in good health for a year."

I. N. SNIVELY, M.D.

Waynesboro', Pa.

—The missionaries refuse to admit Chinese converts to church membership, unless they give up opium-smoking. That is right. Unless the barbarian can give up opium and take to whisky, he isn't half civilized.

News and Miscellany.

Pharmaceuticals.

ACID PHOSPHATE IN MORNING SICKNESS.

One of the valuable remedies in the sympathetic troubles incident to the early stages of pregnancy, is Professor Horsford's acid phosphate. For morning sickness or nausea it has been used with good results, and it relieves the burning sensation which is sometimes felt before rising. Among those who have recommended it are Dr. D. T. Nelson, of Chicago, who says: "I find Horsford's acid phosphate a pleasant and valuable remedy in indigestion, particularly in pregnant women;" and in Philadelphia, Dr. W. Atlee, who observes: "Having used Horsford's acid phosphate very extensively in my practice, which consists mostly of uterine diseases and disorders incident thereto, it is with pleasure I attest my appreciation of its usefulness." Let the patient put eight or ten drops of acid phosphate into half a glass of cold water and take a sip of it, say before rising, or whenever the sickness or nausea is coming on. To some it may be more palatable to take the acid phosphate in hot water or tea, without milk or sugar; in such cases use the same dilution as above. It is equally effective taken either way. Some constitutions may need a stronger dilution, which fact experience alone can decide.

The Laryngological Congress.

At one of the meetings of the Sub section for the Disease of the Throat of the International Medical Congress, the following resolution, moved by Professor Schnitzler, of Vienna, was carried unanimously:—

"That, opportunity having now been afforded for the first time to laryngology to show its capabilities at an International Medical Congress, and its place among the recognized specialities being now fully secured, a repetition of isolated Laryngological Congresses is the less required; and that it is therefore desirable to abandon the plan adopted at the first Laryngological Congress held at Milan last year, of holding a second meeting next year at Paris."

Although the Section and the Congress are not the same bodies, and a resolution of one is not binding on the other, it is evident that as this resolution was carried by a meeting at which nearly all the leading laryngologists were present, the special Congress is practically defunct, or rather merged into the International Medical Congress.

Unsuspected Illness from Trichinæ.

We have no desire to alarm people by needless warnings, but so little attention, in this country is paid to public health, that the public is not sufficiently watchful. We commend to the consideration of all the following extract from a recent Medical Report, by Dr. Jamison, an English surgeon of repute:—

"When we consider the fact that not only ordinary cooking, but smoking, pickling, and even saturation with chloride of zinc solution, are inoperative to destroy the larvæ of *Trichina spiralis* when encapsuled in muscle, it is not unreasonable to suppose that many of the cases of rapid death, with symptoms of collapse following on pain of a rheumatismal character, and accompanied by sweating, ascites, diarrhœa, and vomiting, which are every summer reported, are due to trichinosis."

Many such, at the time, are reported as cholera morbus, cholera nostras, etc.

The Man Who Lost His Identity.

A case of loss of personal identity was reported in the medical journals about two years ago, which attracted considerable attention and led to wide comment. It appears that this is a trick not unknown to criminals, as is testified by the following paragraph from a daily:—

It seems that Charles Howlett, whom the Bloomington mob took out of jail and hanged for killing the keeper, had previously offended the people of the place by fooling them. He went there two years ago, wearing good clothes and showing gentlemanly manners, and quickly became a social favorite. He declared he had no knowledge of who he was, nor any recollection of his past life, being unable to even recall his real name. This intellectual peculiarity won him great sympathy, particularly from the women, and the physicians discussed his case in a public meeting. Then the facts came out that he had long been a professional criminal, and several thefts sent him to prison for trial.

Health of the French Army in Algiers.

The French army in Algiers has suffered severely from exposure to the intense heat, impure water, and to the badly-framed organization of the medical and sanitary branches. A recent letter says: "Owing to the antagonism between the medical departments of the army and the commissariat, hospital organization has been completely paralyzed, and the state of things is not unlike that which obtained during the Crimean war. In Tunis there is an epidemic of typhoid fever. The hospital at Bone has two hundred cases, and the commissariat officers daily refuse admission to others, for want of beds. Medical aid is also deficient, and an appeal for help to the civil practitioners of the country has just been made.

A Post-Graduate Course.

A plan of post-graduate instruction has been organized in connection with the University of Pennsylvania. It will have two courses annually, beginning in October and March. The Secretary of the course is Dr. Edward T. Bruen, 1531 Chestnut street, Philadelphia, who will furnish further particulars on application.

Smallpox in Chicago.

Of 1359 cases of smallpox in Chicago since January 1st, forty per cent. have proved fatal. It is noteworthy that by far the greater number

of cases have occurred in the Fourteenth ward, where the more degraded portion of the foreign element lives, and where attempts at vaccination have been met by open violence at times. In that ward there are 40,000 persons who have not been vaccinated, and of 108 deaths from smallpox in September, 81 were in that division of the city.

Personal.

—Dr. Chavoix, the oldest member of the Chamber of Deputies, died recently.

—Sir Henry Thompson, recently figured in one of *Punch's* portraits, as the distinguished surgeon and the most skillful dinner-giver in London.

—Dr. G. Beck, of Bern, Switzerland, announces that after Jan. 1st, he will issue his *Journal of Medical Polytechnics* monthly, instead of quarterly, as now. He edits an interesting journal, and we congratulate him on his success.

—Dr. D. J. Snyder, of Scio, O., writes us that he will furnish the seeds of the eucalyptus globulus, with directions to plant, to any medical gentleman who desires to attempt the effort to raise them. He is sure that if the plants be kept for the first winter in a hothouse, they would gain strength sufficient to enable them to endure the following winters.

—Dr. D. A. Joy, of Ann Arbor, Mich., has sent us a copy of an open letter to the medical profession, in which he disclaims all responsibility for the unprofessional advertising of electric apparatus, through Wagner & Co., of Chicago. That firm also send a letter exonerating Dr. Day, and stating that they have discontinued the objectional puffs. The exculpation of both parties appears complete.

Items.

—The Guardians of the Poor of this city have decided that if a suitable building is erected on the Almshouse grounds, it may be placed under the charge of homœopathic physicians. It is to be hoped that this absurd arrangement will not be carried out.

—Dr. Charles F. Dickenshied, the oldest resident of Allentown, and a veteran of the War of 1812, died last week, after a protracted illness. Deceased was born in Milford, Lehigh County, September 28th, 1792, and was, therefore, 89 years and 26 days old. He was one of the oldest graduates of the University of Pennsylvania, receiving his diploma in 1812.

QUERIES AND REPLIES.

Aural Department, Jefferson Medical College Hospital.

Dr. P. H., of Pa.—The out-patient clinics in this department are held daily at 1 P.M., under the care alternately of Dr. L. Turnbull, and Dr. C. S. Turnbull. The whole number of visits made by patients last year reported was 1701. The number of operations performed was 49.

Dr. Alfred, of Maine.—The west coast of Florida has this disadvantage over the east coast, that it is more exposed to the "Northers," which are violent, cold northwest winds.

Candidate of Medicine.—There are special courses in this city for fitting young physicians for the army or navy.

Historian, of N. Y.—We are informed that Prof. Dunglison's *History of Medicine* is out of print.

Hypnotist, of N. Y.—From all the accounts we can gather from the English journals, Dr. Geo. M. Beard completely failed to produce any phenomena of a hypnotic character at all convincing to his medical audiences in London this summer. In fact, the comments of the London *Medical Press* were so severe that we hope for his sake they were unjust, although we have no reason to say they were.

Dr. G. C., of Ills.—*Le Courier Médical*, is a reputable journal, and its reports can be relied upon as much as any.

Mr. H. J., of Washington.—Our own opinion, as often expressed in this journal, is that, on the whole, in the present condition of business, trademarks in pharmacy are more advantageous than injurious; we recognize the abuses to which they are liable, but would rather see efforts directed toward remedying these abuses than to doing away with trademarks altogether.

Experimenter, Ohio.—When you come to talk of ozone and its relation to health and disease, we have to say that we know nothing at all about it. The principal object of every new writer on the subject appears to be that none of his predecessors were correct either in their observations or inductions, and he generally proves it successfully.

German Student, Pa.—We know of no English and German Medical Phrase Book. A good one would have a resonable sale, perhaps.

MARRIAGES.

BOWER—FRICKE.—On September 29th, 1881, at the bride's residence, by Rev. W. R. Graham, F. S. Bower, M.D., of Halifax, Pa, and Miss Katie C. Fricke, of this city.

DULLES—BATEMAN.—On Wednesday, October 5th, 1881, at the Princeton Presbyterian Church, Philadelphia, by the Rev. J. Addison Henry, D.D., assisted by the Rev. John W. Dulles, D.D., Dr. Charles W. Dulles to Mary, eldest daughter of James Bateman.

MONTGOMERY—COXE.—At Quincy, Illinois, Oct. 12th, Dr. Edmund B. Montgomery to Miss Agnes Coxe, both of that city.

MOORE—CLAPP.—On September 29th, by the Rev. William S. Clapp, of Carmel, New York, Dr. Robert S. Moore, of New York, and Susie M., daughter of the officiating clergyman.

PECK—WALCOTT.—On the 31st of August, at St. George's Church, Hanover Square, London, by the Rev. W. S. Meriwether, M.A., Curate, assisted by the Rev. Edmond Payne, M.A., Dr. Edward Sprague Peck and Amelia Ames, youngest daughter of the late Edward Walcott, both of this city.

DEATH.

CADMUS.—Suddenly, at Saratoga Springs, on Friday, September 23d, Dr. Andrew L. Cadmus, formerly of Hudson County, N. J.

KELLY.—September 19th, in Philadelphia, Dr. Frank P. Kelly, in the twentieth year of his age.

TURNBULL.—Died, in Vicksburg, Miss., Wednesday, September 28th, 1881, at 4 o'clock, P.M., Honora Elizabeth, wife of Dr. Robert J. Turnbull, daughter of the late James Roach.

THE

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Original Department.

Communications.

A CASE OF OPIUM POISONING, WITH A DISCUSSION OF SOME QUESTIONS OF MEDICAL JURISPRUDENCE IN RELATION TO SUCH CASES.

BY DR. GEO. F. SOUWERS,
Of Philadelphia.

On Tuesday evening last, I was called, about a quarter of nine o'clock, to attend Mrs. A., the messenger informing me that he did not know what was the matter, further than that he had found the lady in an unconscious condition, the lips, skin of the face and the finger tips being blue. On repairing to the house of my patient, I found her in the condition set forth by the messenger. The eyes were set, the conjunctivæ insensible to touch, pupils contracted to the size of a small pin's head, the jaw fallen, tongue dry and brown. Perspiration, especially of the face, very profuse, but on applying the hand to the surface, the integument was decidedly cool, if not cold. From the family I obtained this story: that they had been having a species of family reunion during the day, and in consequence a few glasses of lager beer, not enough, however, to have affected any of them; that late in the afternoon the patient had attended a christening at one of the neighbors, at which, probably, she had had a glass or two of light, German wine; of this, however, they could not speak authoritatively, as she had not been accompanied by any member of the family. She was last seen by one of the family about dusk, a quarter of, or at six o'clock; her movements after this time not having been noticed, as the members of the household were up stairs, whither they retired immediately after dinner, which was served at five o'clock. It was, therefore, it seems, between this hour and half-past eight o'clock that she had taken either morphia or laudanum, from the poisonous effects of which she was undoubtedly suffering. At half-past eight she was found seated on a chair, in the yard, by her husband, unconscious, but capable of being roused, if violent measures were instituted. Upon my arrival, if supported on either side, steps could be passively taken, a sort of automatic movement, and on violently dashing iced-water in the face, the eyelids *convulsively* opened; within five minutes even these actions ceased. It was not known what period of time had elapsed since the dose had been taken, though it was known that she had vomited about six o'clock; this, however, was charged to the beer imbibed earlier in the afternoon; as a consequence I concluded that there was not much hope of any benefit by emesis; still I attempted to produce it by means of mustard and water, sulphate of zinc, etc., etc.; the stomach, however, failed to in any way respond to the measures invoked to produce vomiting: a stomach pump, or the means of providing a substitute, not being at hand, and the presumption being that the larger portion of the poison had probably been absorbed, no further attempts were made to deal with the stomach directly. I should here observe, that early in the case, when violently aroused, in the manner spoken of above, there seemed, from the actions of the patient, to be an intense itching of the facial integument, the hands being rapidly (convulsively) carried up to the face, which was then thoroughly scratched. The

face was pale and the lips decidedly cyanosed, as were also the finger tips; respirations eleven to the minute, with a pulse of eighty. There was no smell of laudanum on the breath; tongue in a decided tremor, very dry, owing somewhat to the fact that breathing was performed altogether through the mouth; in color a very dark brown in the centre (much the color of good opium), the edges a decided (congested) red, and the under side a delicate pearl. Heart's action excited and tumultuous. As measures of treatment, flagellations with a wet towel and the hand were administered, until the arrival of a battery. A hypodermic of $\frac{1}{32}$ of a grain of atropia was administered, which was followed in half an hour by a similar injection; a very slight responsive action on the part of the pupil took place under this second dose, but rapidly disappeared, the pulse mounting up after the last injection to 105; at 10½ P. M., the battery (Gaiffé's) was applied, another $\frac{1}{32}$ grain of atropia also being administered, the pulse slowly running up to 110, respirations falling to six and seven to the minute; no manifestations of uneasiness were produced by the full strength of the battery being applied over the emergence of the trifacial, but I noticed that there seemed to be a more decided impression produced by placing a pole of the battery in contact with the ear, pressing it into the external auditory meatus (the other pole being over the diaphragm); even when coming out of the stupor produced by the poison, and when sensation was returning, this seemed to be the only point at which pain was complained of; from 110 the pulse rose to 116; respirations nine to the minute; a sudden fall then took place in the pulse to 101, at which time the sixth dose of $\frac{1}{32}$ of a grain was administered, the pupils slowly beginning to show the mydriatic effect of the drug; the pulse mounted again to 104; respiration 13; followed in about an hour by a pulse rise to 116, when another $\frac{1}{32}$ was administered; in about another hour the pulse suddenly fell to 96, the face becoming thoroughly congested, reddening having commenced when the pulse marked 101, or at the time of the sixth hypodermic.

With a pulse of 105, and unconsciousness, there was a decided chill, the feet and limbs as high as the knees being cold; this rigor was, however, of but short duration, readily yielding to the application of hot bottles of water and wrappings in blankets. The pupils at no time enlarged beyond their normal size, though almost the first thing complained of by the patient, after emerging from unconsciousness, was *dryness* and soreness of the fauces; this latter may, however, be charged partially to the use of a stiff feather used to promote vomiting, which came on at the time of the sudden fall in pulse from 116 to 96, and at which time she ejected some strong coffee, which had been administered by my directions when she was first seen. Intense tenderness over the stomach, accompanied by frequent vomiting and a subacute condition of bronchitis, made their appearance during the twenty-four hours subsequent to her emergence from narcosis, accompanied by great soreness of the eyes and supraorbital region, just over the supraorbital foramen, as well as of the whole muscular system, due in the latter case, no doubt, to the thorough whipping received. An ounce bottle marked *laudanum* was found, when search was instituted at my direction, in her dress pocket. This quantity had been purchased for the use of her husband in sickness, over six months since; one-half was used at the time, and the rest, which formed the dose taken by this individual was allowed to stand in a closet; its strength was that of the U. S. P., increased, of course, by what little evaporation of the menstruum may have taken place during the interim. I would suggest that in all cases of poisoning, suicidal or otherwise, the physician call for the bottle or package from which the poison was taken, and that he insist upon retaining it in his possession, not allowing any one to handle it subsequent to its coming into his possession; if this precaution be neglected, it may give rise to very lamentable and undesirable results in case it should transpire that a question of criminal poisoning should arise, for the query might be presented, how much of a given drug or what drug was taken; then the presence of the original package or bottle would be important; or it might happen, as in this case, that parties lived together unhappily; that a poisoning took place shortly after a meal, and that no one either could or would give information; if the person did not die a criminal suit might, nevertheless, follow; and while the finding of a bottle upon the person of the one poisoned would not, *per se*, indicate suicidal intent, yet it would be important in evidence. Further, the person should be closely questioned, *immediately after issuance from the effects of the poison*, as to what took place previous, and what subsequent, so far as he remembers, to the taking of the drug. These questions should again be asked after the lapse of a number of hours, say a subsequent visit, in order to see how the two statements tally, for on a second examination a far different story may be told, because of personal intimidation or for family reasons; if the case then comes to court, an infer-

ence can be drawn from both stories, and a just conclusion arrived at. If unconsciousness has been present, the time of its coming on, the length of its continuance, and the time of its cessation, should carefully be noted, in order that an opinion may be formed as to the proper relationship or proportion between the amount taken and results produced. In the case above noted a half ounce of laudanum, taken when more or less alcohol was present in the system, and subsequent to a meal, produced an unconsciousness of ten hours, during which time seven hypodermic injections, of one-thirty-second grain each of atropia, were given, and the battery continuously applied. How quickly the effects were noticed is important. In the case under consideration the drug was swallowed in an outhouse; the patient walked to the hydrant, some thirty feet away, rinsed and corked the bottle, placed it in the pocket of her dress, and walked half way back to the outhouse, where unconsciousness came on and she sank upon a chair. Note should be taken of the character, quantity, mode of administration, and physiological effects of all antidotes employed, as in a criminal case the question might be presented: "Did not the person rather die of an overdose of the antidote than of the poison itself?" and an able lawyer might well argue thus to a jury, and possibly defeat the ends of justice by striving to prove that the doctor, and not the prisoner, had killed the deceased. Further, all vomited matters, as far as possible, should be gathered up and bottled, care being taken that no metal tops or corks are used to stopper the bottles. No matter how small the dose taken may have been, these precautions should be followed, for no one can say definitely, as a general rule, what the *smallest* dose is that will kill, of any given poison. In the case of laudanum, Taylor narrates the case of an infant killed by two drops, equal to one-tenth of a grain of opium, and another in which the same quantity administered to an infant five days old produced death in eighteen hours, although it had even been revived; another in which one minim was followed by fatal results in an infant seven days old, though the smallest fatal dose would seem to be one in which death took place in seven hours, from a dose of paregoric equal to $\frac{1}{15}$ of a grain of opium, the child being four weeks old. On the other hand $7\frac{1}{2}$ grains of opium have been taken without fatal results. For an adult, it is laid down that five grains is a very full dose, though there is a case on record in which four grains of crude opium destroyed life. Of the tincture, two drachms seems to have been the smallest fatal dose, though it is subsequently stated that one half an ounce may have been the quantity taken. There is one case where even in a five-ounce dose laudanum failed to produce sleep, though whether a tolerance had been established is not stated. This is, of course, an important factor in making up an opinion, for certainly if a man is in the habit of using a drug, it will, all other things being equal, take a larger quantity to produce a poisonous effect than if his system was not thus habituated; thus Beck narrates that the Turks will frequently take, in a glass of water, three or four lozenges, amounting to 100 grains. Orfila makes note of a case in which 24 grains of the acetate of morphia failed of fatal effect, though it produced lock-jaw. In this case 40 ounces of blood were taken from the system with most happy results. Castara narrates a case in which 50 grains of the acetate did not produce death; in this instance, also, bleeding was practiced with great benefit; this case was characterized by a marked itching of the skin during and for a number of days subsequent to the poisoning. Christian lays it down that when opium is taken in the solid form, nearly an hour will elapse before the onslaught of the poisonous symptoms; they *may* come on before, but rarely are they deferred any later. The tincture, according to the same authority, generally produces its effects in about fifteen minutes, though these may make their appearance in a very few minutes. Thus the case I have narrated must have succumbed in about five to ten minutes, for certainly no greater length of time could have been employed in the performance of the different motions that the patient had a distinct recollection of making. Another interesting question is, should a stomach-pump be employed in cases of opium poisoning where the patient has come out from the narcotic effects of the drug. To some this may seem a useless question, but I have known it to be done when individuals were so far recovered as to be able to sit up and talk: and I have known it to produce such a disturbing influence of the system as to result fatally, almost simultaneously with the introduction of the pipe into the stomach. In consequence, I should, in the light of such experience, lay it down as a rule, that it is "a worse than useless procedure to introduce a stomach-pump thus late in a case of opium poisoning." For in a large proportion of cases the system is greatly depressed, and the heart's action irritable, if not indeed weakened by the tremendous strain placed upon it in combating the deleterious effects of the poison. Further, all the immediate harm

has been done that could be done by this poison, and it has all been absorbed, and consequently has left a stomach-pump's sphere of action long before the patient emerges from his narcotic condition, and it can be of but little benefit in warding off any subsequent complications due to the poisoning; the conditions, of course, being different early in the case, before thorough absorption has taken place.

PHLEGMONOUS AND CELLULAR ERYSIPELAS.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Indiana.

An attack of cutaneous erysipelas is so open in its assault and natural course, that no one need be deceived for a moment as to its character, career, and final termination, when uncomplicated.

This certainly cannot be said of the phlegmonous and cellular varieties. At least the cases coming under my notice in two pretty extensive epidemics, and in cases occurring at other times, were more or less deceptive in their onset, and especially so during their career, as to gravity and liability to fatal terminations.

After glancing for a moment at the etiology of *this disease*, we shall refer to the history of a few cases coming under our head. We say "this disease," for they essentially are the same in their etiology, pathology, symptoms, and treatment. "Not only are the local effects precisely the same in the two diseases—the same swelling, tension, infiltration of pus, and formation of gangrenous shreds and sloughs; but the constitutional symptoms, though differing perhaps in degree, present no variety as to character. The results also are identical, there being the same local impairment of structure, the same tendency to involve parts at a distance, and to the formation of secondary abscess. So also, these two diseases occur in the same constitution, in the same states of atmosphere, and in the same situation; one form of disorder may produce the other, and, lastly, the same treatment is required for both affections" (Erichsen). This accords with my clinical experience. I shall, therefore, speak of them as one, though there are minor differences. The causes have well been placed under intrinsic and extrinsic; those that are inherent with the patient, constitutional predisposition, and those conditions of general health that invite an assault by the disease. The extrinsic causes cover habits of life that reduce the powers of resistance to disease. Also those surroundings that, by their poisonous and devitalizing influence, after any injury has been received, or operation has been done, produce an onset of this form of inflammation.

Relating to the intrinsic etiology of erysipelas, none, perhaps, exert more power for evil than unhygienic environment. Nothing is more common in current and standard medical literature than statements that foul air, impure water, and unwholesome food, have been more or less the direct causes of attacks of infectious diseases of this class, erysipelas among them.

This is so surely the case, and its recognition so general among physicians, that every one who is intelligent seeks for such causes whenever called to a case of the disease in question. Not less is this so of erysipelas than of diphtheria, typhoid fever, etc. "Were the laws of hygiene attended to as they should be, erysipelas and the allied diffuse inflammation would scarcely be met with in surgical practice" (loc cit). We believe the same may be said in reference to sporadic attacks, and not less of those occurring in epidemics. How very common it is in reading reported cases, to see it stated that the local surrounding had given rise to the disease.

We do not forget that personal habits may present a strong etiological front. The intemperate man everywhere, and under all circumstances, is vastly more liable to attacks of erysipelas, than is the abstemious person. If to such habit there is added insufficient or filthy food and foul air, exposure to cold, damp close rooms for a dwelling place, we have all the conditions favorable to develop this and other low forms of specific inflammation.

That there is in some persons an inherent trend to erysipelas, is beyond dispute. This predisposition is often established primarily by anything that breaks down the general health and holds it long below par. The very influences above named are those that will establish this obnoxious tendency. "The habit of body, however, in which erysipelas is most frequently met with as a consequence of very trivial exciting causes, is that which is induced by the habitual use of stimulants to excess," (loc cit). The indigent and necessitous are not alone in this. The wealthy often indulge in excess in eating, luxurious and debilitating habits, which, coupled with sedentary life, or at best, passive exercise, unbalance the constructive and destructive metamorphosis, often leaving too much debris in the system to act as a ready focus to which any specific poison may attach itself and generate disease.

The hereditary trend is but small. This is

especially true in my own observation of the subjects of it.

Some diseases and pathological states create a condition favorable to the development of erysipelas. It has long been observed that persons of a "gross plethoric habit of body, with a tendency to gout, are predisposed to the occurrence of erysipelas." I have seen severe erysipelas of the cellular variety set up where old chronic ulcers were the starting cause. Also in some low fevers or epidemic dysentery, there is sometimes a supervention of erysipelas. Under such conditions this accident augurs very unfavorably.

In the subjects of albuminuria and diabetes, the tendency to erysipelas is very strong, so that a very insignificant exciting cause will serve to set it off. These same cases are far more obnoxious to it, and the results far more fatal, than in persons not so affected.

Extrinsic causes have been equally well noted, though there may be some wide differences of opinion as to the real nature of some of these, as may be seen further on.

Some very able authorities state that it occurs most frequently in the vernal and autumnal seasons; that sudden vicissitudes of temperature, especially when connected with an east wind, seem to give rise to it.

In the epidemics met with by the writer, they both occurred at mid winter, January and February. One of them was most severe during long continued extreme cold weather. The other occurred during a mild, open winter. I have met with cases at all seasons, but a less number in summer than during any other season. My limited observation teaches me that an epidemic of it may occur at any time, but is most likely to come on during the cold months. The two last cases met with occurred during the very hot term of the summer of 1881, a summer remarkable for its long-continued high temperature. With this, as with other specific diseases, if it is such, the epidemic is more severe than the sporadic cases. The former are also far more liable to involve the deep tissues and important viscera, and far more liable to follow slight injuries. One of the severest cases, admitting of recovery, I ever met with, had for its starting point a superficial pin prick on the thumb-knuckle. Another equally dangerous attack was induced by a very slight abrasion on one of the fingers of the right hand. In this case the sloughing became extensive in spite of the most approved sustaining and antiseptic treatment, and early free incision over the diseased part.

Such attacks rarely occur from slight injuries, unless there is a depraved condition of the blood and debilitated system, or the blood is loaded down with the waste tissue debris that should be eliminated, and at a time when atmospheric conditions favor its development. True, we have sporadic cases; but these are where hygienic conditions strongly favor its development, in a subject whose condition of system is favorable for its reception. What peculiar properties are contained in the atmosphere that favors the development of an epidemic, I believe is not known. That such conditions prevail is beyond dispute.

Erysipelas has been considered contagious. Many believe now that it is so. I am not positively able to dispute their position. It is certainly infectious in all cases where traumatism is present in the persons of those who nurse the disease, or are confined in the same ward where it prevails. It has been long known that surgical operations, however trivial, are dangerous to an extreme degree when erysipelas is present in epidemic form, or in the wards where surgical cases are treated. The open surface offers a free invitation for an attack, and seems to be a fruitful field in which the poison-germ may take root and multiply. But that the phlegmonous or cellular varieties of the disease are contagious in the absence of traumatism, I doubt very much. The writer, in twenty years of practice, has never seen more than one case of either form of the disease in the same family at the same time, though the conditions favoring its development were present; and even slight wounds were present in some members of different families, but yet not attacked with the disease. If the disease were contagious in the common acceptation of the term, certainly there would be many instances where it would spread from one person to another, and one family to another, through the atmospheric medium alone. But it seems that contact of the germ with the wound is essential to the production of an attack in surgical wards, as in private practice. Under such circumstances, that air becomes the medium by which the disease germ is conveyed from one case to another, seems to be assured. In such a sense it may be contagious, because of the presence of traumatism and the disease germ producing the local inflammation.

The very nature of malignant erysipelas carries with it an inherent tendency to destruction of tissue and death of the subject. Finding its victim with an impure or depraved state of the blood, and a lowered vitality, it still further de-

presses the power of the nerve centres by poisoning them, and lowering the power of resistance to disease and death. The ability of the absorbent glands to take up the poison seems good and active enough, but their power to resist the absorption of the poison or the onset of disease caused by it, is apparently destroyed. The system or tissues seem to be in a low state of vitality, with an exalted degree of irritability. At the same time there is little power to throw out the needed plastic lymph to limit the progress of the inflammation, but there is a tendency to the rapid formation of pus and of necrosis of the involved tissue. Hence there is rapid and extensive sloughing of the parts, unless quickly relieved. Phlegmonous and cellular erysipelas, then, are those malignant forms of diffusive inflammation, without self-limiting power, and with rapid tendency to necrosis of the cellular tissue, and extensive sloughing—a condition produced by a specific poison, rendered very active by some unknown epidemic or endemic influence, though betimes producing sporadic cases. That a specific poison germ is the active agent seems clear, though it may not be so easy to prove that such is the fact. The liability of persons obnoxious to it to suffer from repeated attacks, argues against the specific nature of the inflammation. Specific diseases, as a rule, occur but once in the same subject.

In symptomatology, either phlegmonous or cellular erysipelas is more or less treacherous and delusive. To the uninitiated it is truly so. If seen when the skin is but slightly reddened in patches, has a mottled appearance, and not attended with much pain, one may easily be misled, unless he should look well to the constitutional symptoms. If such swelling be limited to a joint, it may be mistaken for rheumatism. It is but a short time since I saw a grave case of this malady in the hands of a physician of ten or more years of experience, who had diagnosed it as rheumatism and treated it as such. The subject died in his hands. Again, I have seen the disease involving the whole forearm, with mottled, slightly red skin, and very boggy, yet by the attendant thought to be not serious until evidences of dissolution were fully and inevitably at hand. The symptom of pain is also deceptive. True, it is generally severe, but it may be quite absent, and the patient be fearfully deceived as to the gravity of his disease. Time and again have patients scouted the necessity of the needful heroic surgical measures, when proposed and the gravity of their cases set forth. Often the friends will protest the needlessness of such a bold use of the knife. But the attendant who has had his eyes fairly opened by the grave results of a few seemingly mild cases, will be in no mood to listen calmly to objections which, if heeded, would send his patient to death with astonishing rapidity.

I have thus spoken of the deceptive nature of the symptoms, because I have met with so many cases where one might be easily left to suppose nothing of a serious character was affecting the patient. Also because I have seen some very respectable practitioners grossly deluded, and beguiled into the belief that there was no danger of a fatal issue. One case seen in consultation but recently, terminated fatally, the attendant doubting the seriousness of the case until the nerve centres were overwhelmed with the poison, and respiration and circulation were rapidly failing.

No doubt such warnings to those practicing in hospitals are needless, as the disease is oftener seen there, and all its characteristics and grave dangers promptly noted. But where men are engaged in civil practice, and go along for years together without meeting with a single case of it, much less an epidemic, such cautious admonitions will be valuable if heeded. With them it is not the great surgical cases that are first attacked, but it is some case where no wound has been inflicted or a very slight one has occurred as the exciting cause of attack.

For diagnosis and prognosis, we refer the reader to the standard works on surgery, where they may get a clear idea of the onset and gravity of the disease.

As to treatment, we prefer to give it as we relate a few cases in practice.

Mr. V, æt. 58, of spare build, broken down general health, costive habit, nervous temperament, came to me complaining that he had abraded the middle finger of the right hand, and while the slight injury was as nothing, yet there was a red line extending from it to the elbow, which was tender and painful. The finger was a little swollen and tender. The axillary glands were already enlarged and tender to pressure. The accident occurred two days before his visit. Tongue was white, pale, flabby, indented by the teeth; there was a slight elevation of temperature; pulse 90, weak; diagnosis, cellular erysipelas.

Prognosis grave. There would be very great prostration, probably considerable sloughing in the axillary region, which it was doubtful whether this broken-down man could endure and live, or if he did outlive it, there would be a

long siege of ill health, with low vitality and slow recuperation.

He was given a mild cathartic and placed upon tr. ferri mur. ℥ss, every three hours, and

℞. Quiniæ sulph., grs. iv
Ext. nucis vom., grs. j. M.
Ft. pil. ij.

every four hours. Locally to the axilla, he had flaxseed meal poultices, wet with a strong solution of the sulphate of soda. The same also to the wound on the finger.

On the second day all his symptoms were greatly aggravated; the arm swollen a little more; the axillary glands much larger, very tender and painful; pulse rapid, feeble, rigors frequent; tongue furred heavily, and pale; no appetite; some nausea; great prostration generally. There was no boggy sensation, as yet. The treatment was continued with the addition of eggnog and milk punch, oysters, beef essence, etc. He took of some one or more of these every four hours. He also had anodynes sufficient to control pain. In the evening of that day there was slight bogginess in the axilla and down the chest wall for three or four inches. The skin was brawny to a marked degree. Several free incisions were now made, the flesh cutting and creaking under the knife, almost like hard leather. There was but little flow of pus, considerable discharge of thin, watery blood. There was greater prostration and an aggravation of all the symptoms. The tr. ferri. mur. was increased to ℥j every four hours; stimulants and tonics pushed to the utmost he could bear, and nourishment crowded.

On the morning of the third day there was less intense suffering, but greater prostration. The erysipelas had extended down the chest wall to about the tenth rib, and in front quite to the nipple, and posteriorly to near the border of the scapula. There was but little redness of skin over most of this space; almost no tenderness; some pus was oozing from the incisions. There was an expression of feeling better, but very weak. The symptoms in all respects seemed to have ameliorated, except this extension of the swelling, and this, from its want of redness and tenderness, was very deceitful as to its gravity. A little pressure showed it was boggy and the rapid work of destruction was going on, masked behind the quite healthy looking integument. When I proposed the necessity of making a large number of small incisions over this large space there was a strong protest. Counsel was asked for, and as I was requested to name the consultant, I took care to select one whom I knew understood well the nature of the disease. He was even more emphatic than I was as to the necessity of free incisions and several of them. They were accordingly made at once. There oozed out, even of those made at the lowest point of swelling, an ugly pus, as there did from those higher up. Antiseptic poultices were used as before named, to which carbolic acid was added to about five per cent. Other treatment continued as before.

On the next morning, the whole space above named was in a sphacelated condition, and the swelling had extended anteriorly and posteriorly perhaps two inches; other free incisions were made. Pus was being freely discharged everywhere over the space. The prostration and suffering were very intense. Treatment continued. To make a long story short, no one expected his recovery. All this great slough fell out in a few days, as deep as the cellular tissue extended, leaving a free suppurating surface, to be healed as best it could. The system rallied and the slow process of recovery set in. He was confined to the house for nearly two months, and for four months longer he was only able to walk about and nurse himself. He used every hygienic measure pointing to health, took ferruginous and other tonics abundantly, had the best of diet, and yet he rallied exceedingly slowly and never reached his former strength.

Another case, that of a lady in impaired health, received a slight injury of her right hand, scarcely abrading the skin. She was of sedentary and costive habit, nervous temperament, subject to migrainous headache. The wound was not deep, scarcely worthy of note, and would not have been noticed but for the burning pain that immediately followed its infliction. Three days after receipt of the injury there was a sharp tingling sensation at the site of the injury, which increased to intense pain, tenderness and tumefaction. There were rigors present at short intervals, and very great mental and nervous depression. Pulse rapid and weak, nausea, vomiting, cephalalgia. On the fourth day all the symptoms were greatly aggravated, and a red painful line extended up the arm; axillary glands tender, and a small slough at the site of the injury. The hand was swollen and boggy, forearm becoming involved. There was great pain and great systemic prostration. She was placed on tr. ferri mur., ℥ss every four hours; quinia sulph., grs. iv, every four hours; anodynes q. s., and locally antiseptic poultices. Free incisions were advised but rejected repeatedly. The bowels were kept open by enema. The urine was free; temperature ranged from 99–100½, was never high.

There was a continued aggravation of the case in all its features and in the extension of the disease up to near the elbow, by the fifth day The same general plan of treatment had been continued. Stimulants had been added and nourishment crowded. At no time had the swelling been extensive or the skin greatly reddened, except at the site of the wound. Indeed the skin was quite normal in color. For this reason neither she nor her friends could see the need of a free opening. But the pain and prostration increased, as also the bogginess of the hand and forearm; delirium set in. Thorough alarm now caused an accession to my positive demands for operative interference. An incision, long and free, was made in the dorsal surface of the boggy hand, down through the cellular tissue. The incision was four inches long. It discharged pus and blood freely. I preferred several small incisions, but knowing I would never get a second stroke I made the most of the one opportunity. There was an immediate amelioration of the symptoms, and gradual recovery, which, with the exception of a few hysterical complications, was satisfactory. The hand was comparatively useless for some months, but gradually resumed its normal functions.

The exciting cause here was no more than a mere scratch with a pin, and but for the unusually severe pain, the case would have run on untreated, to a perhaps dangerous condition, before the friends would have apprehended the situation. The discoloration was slight and real danger seemed to be absent. Yet there was great danger, from the very poisonous nature of the disease.

Another case was seen during the heated term of the past summer (1881). An old lady had indolent ulcers on her right leg. They were very sluggish. I made a very shallow crucial incision across the surfaces of them, hoping to cause them to take on better action and heal, at least partly up. Two days later cellular erysipelas set in, and the whole limb to the knee became involved. She was liberally sustained with iron, cinchonidia, nourishment and stimulants. Numerous small incisions were made, to liberate the pus. After a long siege she recovered.

In all three of these cases it will be noted how very small was the injury that excited the trouble. At a time when there is no tendency to erysipelas such wounds go unnoticed, and almost unthought of; but the smallest wound or surgical operation is dangerous when the disease is prevalent. The history of many other grave cases might be added, and some also of the phlegmonous type, where no wound was present as the exciting cause. The treatment was the same as above given, in its general plan. So far I have been fortunate enough not to lose any cases of this disease. But I know they are most dangerous, and it has been my good fortune not to have cases that could not be controlled, rather than any marvelous skill of my own. I have seen in counsel such cases in the hands of others that terminated fatally, where the treatment had been after the most approved plan, thoroughly carried out. No one can boast in these cases, for the mildest of them sometimes take on complications that prove rapidly fatal.

Before closing I desire again to call attention to the deceptive nature of the symptoms, and how readily a patient may be allowed to pass on to the very gates of death before any alarm is felt by the practitioner, unless he comprehend well the natural history of the disease in its destructive tendency and liability to overwhelm the vitality by poisoning all the blood, vital organs and nerve centres. This done, stealthily done, and the patient is beyond our power of rescue.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF DISEASES OF THE MIND AND NERVOUS SYSTEM.

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Cerebral Softening.

Case 3.—The patient was a German, fifty-eight years of age, powerfully built and healthy looking. He was accompanied by his two sons, from whom the following history was obtained: He had always enjoyed good health up to last fall, except that some years ago he had chills and fever; and four or five years ago he had an attack of rheumatism, and another about two years since. At that time the pain was chiefly in the chest and one arm, which was swollen. The troubles from which he is now suffering date from September 17th, 1880. On the preceding day he had been on a little spree, as was his custom once or twice a month. However, he never became so drunk but that "he could always navigate." On the morning of September 17th, just after getting up, he was leaning against the barn, and talking very excitedly to another man, with whom he was exceedingly angry. Suddenly he felt sick and dizzy. He was immediately assisted into the house and placed upon the sofa. By this time he had nearly lost consciousness, and had only enough sense to tell what had happened. It was then noticed for a moment that

his head was drawn around toward his right shoulder. A spasm of the facial muscles followed, and he then went off into a regular epileptiform convulsion. He had five of these epileptic spasms in succession. For the next two or three weeks he remained sick; and during this time he had to be fed, because he had lost the control of the muscles of the hand, so that he could not find his mouth with his spoon; and he would grasp his fork and other articles upside down. There was, however, slight, if any, paralysis of the right hand. Since then he has been troubled with sleeplessness at night, and some shortness of breath, but has had no more convulsions.

The principal symptoms which he at that time presented are those which he still manifests. These Prof. Hammond endeavored to bring out more vividly, by a personal examination of the patient.

He first asked his name. The reply, after some hesitation was, "Johnny," "Sonny," "I am all over." "I didn't say," "Schordie," "George," and other such unmeaning words and disconnected phrases. When asked where he lived, he would only say, "See over there," "Some over there," and other unintelligible sounds, which could not be called words. His son said that his name was George, and that his home was in Westchester. When asked his son's name, which is John, he answered, "I know, but can't," and so on. Next a question in German was asked, "Schlafen sie wohl?" but this he did not seem to comprehend any better than the rest. When asked if he had any pain in the head, he replied, "I can't." "No." But his son said that he had always before told him that he did have pain there. Whenever the patient tried to speak, his tongue seemed to go automatically, and to be entirely beyond his control. He also seemed scarcely able to appreciate the meaning of what was said. On examining the top of his head a large encysted tumor was found, which his son said had been there for years, but was growing gradually larger. It was caused by a blow from a stick, or club, and so had no connection with the present disease.

The examination being finished, Prof. Hammond now said, that he had first seen the patient two weeks ago at his office. He could then talk little or none; but since that time he had been under treatment, and was now considerably improved. He seems to know people whom he sees, but he cannot tell who they are. His speech is inarticulate, and he cannot remember names. He, therefore, has aphasia, in both its amnesic and ataxic form; and here it is due to the shutting off of the blood from a part of the brain, probably, by an embolus. He has lost the memory of some words, and the ability to pronounce others, especially nouns. But some words he can pronounce, thus showing that there is no paralysis of the tongue. Moreover, he can neither read nor write, and so has atexia and agraphia; and he probably could not express what he means by gestures, any more rationally than by words.

In reference to such cases as the present, Prof. Hammond continued: There are two varieties of cerebral anæmia, the partial and the general. Partial cerebral anæmia may be caused by the cutting off of the circulation from a portion of the brain; as by an embolus from a distant part, or by a thrombus formed in one of the cerebral arteries, by the coagulation of the blood at some point where the internal coat of the artery has become roughened. This clot keeps back the blood from the parts of the brain which are normally supplied by the artery, and as a result of the failure of nutrition, softening of the brain substance follows. Or again, rough surgical handling of an aneurism, or an operation on it with an electrical needle, may cause a small portion of the clot to be broken off, and this becoming lodged in some small cerebral artery, may plug it, and thus form an embolus. The most common way for an embolus to form, however, is by the detachment of a heart clot; as the case of this patient illustrates.

Partial cerebral anæmia, due to an embolism, may be ushered in by any of the following symptoms: The patient is perhaps standing quietly, when suddenly he staggers and falls, and, it may be, loses consciousness. He is now, probably, found to be completely paralyzed on the right side, and is also aphasic. This is the worst form, and may be followed by death in two or three days. Or, in another class, a man in perfect health may suddenly lose the faculty of speech, and not be aware of it until he attempts to talk. Again, the only symptom may be a slight paralysis of the hand and arm. The mental phenomena in any of these cases may vary from a temporary derangement of the mind to a profound coma.

Other symptoms may follow the first attack. The patient does not recover, but after three or four days he is still found to remain paralyzed and aphasic. He may continue thus, or with slight improvement, for weeks or months, and then a second attack may occur, by reason of the detachment of another clot from the heart; and in this or subsequent attacks the shock and mental disturbance will be so great, as to cause a coma which will become constantly deeper, until terminated by death. If the embolus be quite small, only slight symptoms may follow, from which the patient will in time recover.

When the physician is first summoned to a case presenting any of the above conditions, his first duty is to inquire into the antecedent circumstances and history of the patient. For, in the first stage, it is sometimes very difficult to distinguish this from cerebral hemorrhage. But the clinical history will decide this point. If there have been previous attacks of rheumatism or heart disease, this should arouse suspicions of embolism.

The connection between rheumatism and cerebral embolism is this: Rheumatism is a disease which tends to affect the fibrous tissues of the body. The internal lining membrane of the heart is one of these. When this becomes affected its surface roughens, and then the fibrin becomes detached from the blood as it passes through the heart, and small clots are thus formed on the walls, chordæ tendineæ, or valves. The fibrin is here separated from the blood, in the same way as it is done outside of the body when it is whipped with wisps of a broom. The heart

clots thus formed may vary in size from a mustard seed to that of a large pea. If one of these from any cause becomes detached, it passes along in the circulation, and may finally be stopped in some small artery of the brain, and there form an embolus, which will give rise to any of the symptoms already described.

A patient first seen in one of these attacks presents a striking condition, and one about which little was known until within the last twenty years; and even now, the profession generally appears to know but little about it. These attacks were often called apoplexy, and whenever there was paralysis due to cerebral disease, but with no loss of consciousness, it was called a paralytic stroke. Nothing of the relation of these cases to rheumatism and heart disease was then known. But even now it is sometimes quite impossible to diagnose this from cerebral hemorrhage; for a man may have an embolus without a previous history of rheumatism or heart disease; and again, he may have such a history and still have an apoplexy, and not an embolism. But though the character of the disease cannot certainly be determined in the first stage, yet as it advances other elements appear which will settle the diagnosis. If it is cerebral hemorrhage, there will soon be developed contractions in the paralyzed muscles, especially in the hand and arm. The hand will be turned inward, and the forearm semiflexed on the arm, and held across the chest as if supported in a sling; and the legs will become stiffened and have a peculiar swing in walking. In these cases, also, the paralysis is usually confined to the right side, and is accompanied by unconsciousness at the onset of the attack.

The remote cause of the disease is generally rheumatism, but the exciting causes are various. It may be rage, as in the present case. An embolus might not become detached for many years, if there were no exciting cause. Anything that increases the force of the blood current, or excites the heart, may bring on an attack. Such as a blow on the chest from a fist, or any strong muscular exertion, such as wrestling, lifting heavy weights, straining at stool, or the efforts of child-birth, and even the act of stooping down, as in lacing a shoe. However, any of these same causes may also excite cerebral hemorrhage, because they increase the blood tension in the vessels of the head, and so lead to their rupture.

We now come to the rationale of this condition. It will be noticed that paralysis, if present, is almost invariably on the right side only, and that it is accompanied by aphasia. The location of the lesion is, therefore, in the left hemisphere of the brain. This is easily explained when we consider the arrangement of the arteries, as they are given off from the arch of the aorta.

It will be seen by this diagram, that as the current of blood passes out of the heart, carrying with it a detached clot, it rushes by the coronary arteries, which are now closed by the auricular valves, and the embolus is driven along the upper curve of the aorta, and passes by the innominate artery, the opening of which is in such a direction, as not to be likely to stop and draw in the clot. When, however, it reaches the left common carotid, which opens into the aorta at nearly a right angle, the current tends to rush directly into this, and the clot is stopped before it can get by, and is drawn in. It now tends to follow the most direct course, and so passes by the external carotid, which leaves the bifurcation of the common carotid at a slight angle, and flowing up the internal carotid, it goes as far as possible without obstructing a vessel. If the clot is very large it may plug the common carotid, but if not, its most direct and natural course is toward the middle cerebral artery. Here it may be stopped at the junction of the two arteries, or it may pass on into the middle cerebral, or if not too large, into one of its smaller branches, and there form an embolus. The severity of the symptoms following will depend principally upon the size of the vessel which becomes thus plugged. The blood is in this way shut off from that part of the brain which is supplied by the obstructed artery, and its tissues become softened and degenerated, and breaks down, and is destroyed. This is the commonest cause of softening of the brain. If only a very small vessel is plugged, loss of speech may be the only symptom.

Thus Trousseau mentions the case of his colleague, who was reading, and when he for some reason attempted to call his servant, he unexpectedly found that he could not speak a word. But it rarely occurs that there are not other symptoms, besides aphasia. However, if speech alone is lost, the seat of the obstruction and the part of the brain involved can be determined quite definitely. The location of the centre which controls the faculty of speech is now known with considerable certainty. It was formerly supposed to be situated in the posterior part of the third frontal convolution, but recent investigations tend to show that it also includes the island of Reil, and probably the anterior part of the temporal lobe. It is almost universally located in the left hemisphere of the brain. There seems to be in most individuals a predilection to use the right hand principally, and this preference appears to be inborn. But aphasia, due to a lesion on the right side of the brain, is proportionally about as frequent as to find left-handed people. This indicates that the left hemisphere is exercised more constantly than the right. Accordingly, we find the left side of the brain larger, and better supplied with blood, and developed earlier in life, and having the advantage generally over the right. This increased nutrition of the left hemisphere predisposes to a more constant use of the muscles of the right side of the body. But in men who use the left hand in preference to the right, the right side of the brain is found to be the better developed. So if a left-handed man should have an embolus in the right middle cerebral artery, he would still be aphasic, because the centre of speech in him would be located on the right side.

The patient here to-day has aphasia, with only slight paralysis of the right hand. The mildness of the symptoms shows that he has only a small embolus probably, which plugs the arterial branch going to the speech tract on the left side. There are two varieties of aphasia. In one, the amnesic, the patient loses the memory of words,

and consequently cannot express himself, though he may know what he wants to say. In the other, or ataxic variety, he knows what words he wishes to use, but cannot pronounce them, because of his inability to coördinate the movements of his tongue; and the result of his efforts is a confused mixture of unintelligible and disconnected words.

There has been much discussion as to the way in which improvement, or recovery of speech, takes place in these cases. It is probably by one of two means. Either the collateral circulation is restored, by means of anastomosing capillaries, or some other part of the brain assumes the functions of the diseased portion. Some observers deny the possibility of there being any collateral circulation, for they say the arteries of the brain do not anastomose, except by the circle of Willis. But for us clinical experience should be more of a guide than speculations. We know that patients do slowly recover their speech; and if there is no nutrition of the part of the brain where the speech centre is located, there will be death of the tissue of this part, and consequently no speech. There is no good authority for believing that there can be a vicarious action of one part of the brain for another; yet many believe this to be the solution of the difficulty. The truth is, probably, that the part is nourished by a collateral circulation. This is probably the cause of the improvement in the patient before us. There is a theory that the embolus undergoes fatty degeneration and finally becomes absorbed, and thus the obstruction in the circulation is removed, and the diseased portion becomes revitalized. This is possible, but doubtful.

Treatment.—All patients of this class, if they recover from the first attack, and do not die from coma, should be treated as this man is now being. The indication is, to improve the nutrition of the brain. There are some things which are thought to do this. Blisters are sometimes applied to the head, but this is absurd. Blistering cannot open a plugged vessel, and thus restore the circulation. Yet not long ago a patient in this condition was seen by me, and the attending physician had administered large doses of iodide of potassium, and applied blisters to the head; but neither of these means are of any use. They may draw the blood to that portion of the head until it meets the obstruction, but it must be remembered that the anæmia is beyond the clot, and in front of it there is already congestion, which is thus being increased, and so doing more harm than good. The one great and grand thing to do when a patient is seen in the first stage of the attack is, to *let him alone.* Merely keep the head slightly elevated and cool, and there stop. Later on, after the active symptoms of irritation, such as muscular twitchings and convulsions, and the general prostration, have passed off, then the head should be kept warm, at an equable temperature, but not hot, so as to facilitate the flow of blood to the part. Otherwise simply carry out whatever indications may arise, such as drawing off the water, if the bladder is paralyzed, or administering a cathartic, if there is obstinate constipation. The diet should be nourishing and simple, and the habits regular. But if the strength continues to fail, and there appear symptoms of heart weakness, the question as to whether stimulants should be given then arises. When such a crisis comes there is only one thing to do. Alcoholic stimulants must be administered carefully, in small and repeated doses, and the effect closely watched. So the patient should be tided over the dangerous period, until the vessels can recover their normal relations. But after all active symptoms have disappeared, something should be done in the way of trying to improve the nutrition and power of the brain. Strychnia and phosphorus seem to have such an influence. One-tenth of a grain of phosphate of zinc and one-third of a grain of nux vomica may be given at a dose. The following is the usual formula:—

℞. Zinci phosphatis, gr. iij
Ext. nucis vomicæ, gr. x. M.
Fiat pilulæ xxx.
Sig.—One pill three times a day.

This has been the treatment of the present patient for the past two weeks, and as he seems to be improving, it will be continued.

In cases where there is still some paralysis, galvanism, or electricity in some other form, should be applied to the affected muscles, and at the same time they should be exercised by passive motions, rubbing, hot applications, and so forth. If, in the first stage, the patient feels chilly, or cold, from the shock, the temperature of the body may be kept up by hot applications or other means.

Much may be effected in trying to reteach these patients to talk, by repeating to them often those nouns and names which they seem especially to have forgotten. They usually forget the names of persons, and of the commonest things; as this patient illustrates. When a watch is shown him he calls it a "ring post," a "boot," and "newsboys." A pencil he calls a "capie." A hat is "John," and so on Now, if you try to make these people talk, by patiently teaching them to use the commonest words, mostly names of things, in a short time they will be found to have a vocabulary which will be very serviceable to them. An example of this fact is that of a lady patient of mine, who when I first saw her could only repeat over and over one single phrase, but after six months of education, she could use correctly three or four hundred words. This is quite a gain, when we consider that most of us, in our ordinary conversation, probably make use of only about one thousand different words in a year. This man should be taught in this way, for some time each day, and he will probably continue to improve in his talking, as he has done within the past two weeks.

Notes on Case 3.—The review of this case suggests the thought: How is it, that the faculty of speech is sometimes restored after aphasia has once existed? In answering this, the question arises, as to whether the so-called speech centre is really the source from which impulses are carried directly to the organs of speech, or whether the true source is not in the corpus striatum beneath, to which impulses are transmitted from the cortex. Experiments seem to point rather to this latter being the true condition. The gray matter of the cortex is then thought to have

rather an intellectual function, and merely originates ideas, and then stimulates the special centre beneath to carry them out Now, if this be the case, we must search here, in the corpus striatum for the source of both amnesic and ataxic aphasia, which occur when the speech area is injured or destroyed.

If the gray substance of the convolutions in the speech region is the source of the intellectual ideas relating to the memory of words, it is evident that obliteration of this portion will be followed by forgetfulness of what words to use in order to express ideas which may have originated in some other portion of the cortex. So we find that amnesic patients have ideas about things which they cannot remember words to express.

But when we come to explain the cause of ataxic aphasia unaccompanied by the amnesic variety, we must bring in another element, the existence of which experiments have apparently demonstrated, namely, that there appear to be so-called sensory areas in the brain, which, if affected, interefere with or modify impressions which are normally transmitted to the brain by the sensory nerves, or which originate in the mind itself. Thus there appear to be visual, auditory, tactile, and other sensory areas or centres. And if the visual centre, for instance, were destroyed, though impressions would still be carried through the uninjured optic nerve, yet there would be no consciousness of a perception in the intellectual portion of the brain.

In a similar way, the inability of the perceptive portion of the cerebrum to determine in what condition of contraction or relaxation any of the muscles of the body are without the aid of other senses, will account for the lack of coördinating power over these muscles when the tactile centres are involved in the disease. So in the ataxic aphasia, the inability to control the movements of the tongue may be due to partial or complete paralysis, and hence blunting of the sensibility of the tactile nerve centre of the brain which receives impressions from the muscular fibres of the tongue; and this prevents the patient from knowing in just what condition of contraction the muscles of the tongue are at any given moment. So that if he starts to speak and puts his tongue into position to pronounce the first syllable of a word or sentence, when he wishes to change its position, so as to pronounce the second and following syllables, it moves about automatically, and is most likely to pronounce those words to which it has become most accustomed. This action is similar to that seen in the walk of a drunken man, or one afflicted with locomotor ataxia, who may not be able to coördinate the muscles of his legs, simply because the muscular sense, or tactile sensibility of his legs and feet, is blunted, so that he does not know, from the impression made upon the terminal nerves, in what condition of contraction his muscles are. And if he attempts to walk without the aid of his eyes to help him determine the position of his limbs, he will stagger about and put his legs into as indefinite and peculiar positions as the man with ataxic aphasia will his tongue in pronouncing unmeaning and disconnected syllables.

So we conclude, that where there is ataxic aphasia, the destruction of brain tissue from disease has involved the tactile area for the tongue, which is probably located in some portion of the speech area. It is thus easy to see how both forms of aphasia may be present simultaneously, if the disease be so extensive as to involve the whole of the region of speech.

We are now prepared to consider how it is possible for speech to be partially and gradually restored in these cases. There can be found objections to every hypothesis heretofore advanced to account for this. It seems, however, that the following explanation has something, at least, to recommend it.

We have seen that the lesion is generally on the left side only of the brain, while the other side is still intact. Now because we have found that the "centre of Broca" on the left side is principally concerned in speaking, it does not follow that the same centre on the right side has not also been partially educated to assist the left, any more than the fact that the education of the motor area for the right hand and arm has been carried on to the total neglect of the corresponding area of the opposite side. And we know that when a man has lost the use of his right hand and arm, from paralysis or other cause, he can educate the left hand, so that it may ultimately become as skillful as the right. So it appears at least possible that the partially educated speech area on the right side of the cerebrum may gradually be educated to assume the functions hitherto performed by the left side. The fact that after a paralytic shock causing aphasia the patient still has an awkward and blundering use of words, though the left speech centre may be utterly destroyed, seems to point to the probability that the right side is attempting to perform the duties of the left, to which it is as yet unaccustomed. And just as a child may be slowly educated to talk, so these patients, by faithful teaching, will gradually regain the use of language.

An objection to supposing that the left area is gradually restored by a collateral circulation, and thus at last reassumes its accustomed function, is the fact that when an embolus or thrombus forms in an artery there is a stasis of blood throughout the whole neighborhood of that artery, in the vessels supplied by it. And this stasis causes the coagulation of the blood and the extension of the clot throughout all these branches. Thus the arterioles become clogged, and they finally degenerate into mere cords, just as is the case where a ligature is tied around a small artery. Now these impervious cords can never again allow blood to circulate through them, and so it is difficult to conceive how there can be any collateral circulation where there is no means for the blood to pass into the diseased part. Furthermore, this view seems to be strengthened by the fact that, on post-mortem examination, the brain substance of this part is found to be softened, broken down, and frequently destroyed completely.

For these reasons, it seems more probable that the speech centre on the right side assumes the duties heretofore performed by the left. So it follows that efforts at education may be made, with hopes of gradually restoring the lost faculty.

EDITORIAL DEPARTMENT.

PERISCOPE.

Localized Cerebral Lesions.

From the study of twelve cases of localized cerebral disease which he has published during the last four years, Dr. E. C. Seguin, in the *Journal of Nervous and Mental Disease*, for July, 1881, draws the following conclusions :—

1. The motor area of the cerebral cortex and allied white substance extends anteriorly as far as the lower half of the second and first frontal gyri, and posteriorly as far as the anterior part of the interparietal fissure.

2. The region lying between the limits indicated above, the middle regions of the hemisphere, on its convexity and (to a certain extent) on its median surface, including the posterior parts of the first and second, the whole of the third, frontal gyri, the whole of the ascending frontal and ascending parietal gyri, with their terminations in the longitudinal fissures known as the paracentral lobule, with probably the upper parietal lobe—all these cortical parts, with their associated segments or fasciculi of white matter, have strong motor functions, being in direct relation with the muscles of the face, tongue, arm, and leg.

The former of these statements is supported by three, the latter by the remaining nine of the twelve cases reported.

Included under the latter general statement a further and more elaborate induction is permissible :—

a. The lower part of the third frontal gyrus is intimately connected with the organs of speech (and the function of language).

b. The middle parts of the ascending frontal and ascending parietal gyri are directly connected with the arm of the opposite side.

c. The upper or posterior part of the ascending frontal and ascending parietal gyri, and the paracentral lobule (also the upper parietal lobule ?), are directly connected with the lower and upper extremities of the opposite side, and perhaps more closely with the leg.

A Case of Lupus Exedens Successfully Treated by Creasote and Calomel.

The following case is reported in the *Medical Annals* for Sept., 1881, by Dr. Clinton B. Herrick :—

P. S., aged 65, was admitted into the Albany Hospital (service of Dr. A. Van Derveer), October 21, 1880, with the following history: No trace of disease of ulcerative nature in family. About fifteen years previous patient first noticed a small wart, about the size of the head of a pin, in front of left ear, which remained about the same for a period of five years. Then it began to get a little sore, and if scratched would bleed, a scab forming afterwards. He also noticed then that a small ulcer was progressing, which increased and spread downward, and then toward his eye, the ulcer healing and crusting over in its track. The character of the sore was, in form, irregular, without discharge, up to this time, and painless, being accompanied, however, with an intense itching sensation, so great sometimes that the patient could scarcely control himself. The disease advanced, surrounded the eye, implicated the lids, and crept on over the left side of the nose, down to the alæ, and a portion on the right side. About three months before coming into hospital the ulcer began to discharge a thin, purulent matter, very profusely, so as to require, at times, redressing every hour or less. When admitted, the disease covered almost entirely the upper half of left side of face. At first, creasote alone was applied, then the di-chloracetic acid was used with some benefit. Then applications were made of creasote and calomel, and from the first use of it the ulcer began to improve. The method of using it was to take a camel's hair pencil, dip it first in the creasote, then in dry powder of calomel, applying it to the edges and where depressions existed, the brush with a twirling motion dislodging and removing the cells. By this treatment, the surface glazed over with healthy skin, its size diminished, and at present there only remains a small portion of the disease over the eyelids, without any indications of its returning or spreading again.

On the Antiseptic Treatment of the Zymotic Diseases.

Dr. A. D. Macdonald writes, in the Dublin *Medical Journal* :—

When attending the lectures of the learned professor of the practice of physic in Edinburgh University, it struck me that antiseptic treatment was the true and rational corollary to the highly probable germ theory of infectious disease. Granted the germ theory to be true, it seemed to me to follow as naturally in medicine as in surgery that the proper course to adopt was to kill the germs, or, if that be impossible without serious results to the patient, at all events to lower their vitality. In the *Journal* for June I briefly referred to the administration of carbolic acid in whooping cough. Since writing I have had the opportunity of giving carbolic acid in six cases of scarlatina. Fully two months ago I had tried it in a solitary case.

The sulpho-carbolates used to be given in Edinburgh, but, unfortunately, they have fallen into neglect. Recently a German physician has treated typhoid fever antiseptically with good results, and equally favorable has been the subcutaneous injection of solution of benzoate of soda in yellow fever, where the multiplicat on of germs in the blood has been demonstrated to occur, thus adding another factor to the induction proving the germ theory.

As yet I have not felt quite confident enough to quit the apron strings of Mindererus, but have given the glycerine of carbolic acid in combination. Six cases have been so treated thus far—

two with copious rash and pretty severe sore throat. The dose given was one minim of the acid every four hours in one of the two, a young man of 19; a quarter to half a minim in the other cases, children. All have done perfectly well.

Now, what I have said by no means proves that carbolic acid is a remedy for scarlatina; long experience and strict investigation alone will do that, but, theoretically, it is good, and practically, I have shown that carbolic acid may be safely given to scarlatinal patients. Thus, there is a starting point for further research. There is the fact to help us in selecting this as the scarlatinal antiseptic, that it has proved of some benefit in the, in some respects, analogous general exfoliative dermatitis. The variety of germs must necessarily be as great as that of the zymotics themselves, but there is also a variety of antiseptics as great as the variety of germs. We carefully attempt to destroy the germs in the air of the sick room and discharges of patients, by disinfectants. Why not also thus attempt their destruction in the body of the patient?

Erysipelas and Puerperal Fever.

As bearing upon the question of identity of the above mentioned two diseases, Dr. Frank H. Rowe, of Cumminsville, O., writes to the *Obstetric Gazette*, for September, 1881:—

I was engaged to attend Mrs. L., in confinement, when about six months pregnant. Escaping most, if not all, the natural illness incident to her condition; I did not see her until her labor had somewhat advanced, very nearly to the close of the first stage. I had been telephoned for the previous day, but being unavoidably detained by a case, my friend, Dr. Isaac Miller, responded for me; supposing, as I did, naturally, that her labor had commenced and that she would require immediate attention, as her full time, according to her careful calculation, had already expired at least two weeks. I was notified by Dr. Miller as to her condition, stating that it was a case of erysipelas, for which he prescribed, and left with the understanding that I would call the following day, which I did, and found my patient as before stated. In regard to her labor, it was completed naturally in a short time: but as to her general condition, she was naturally of a scrofulous habit, a fact with which she herself was well acquainted, as well as her friends, as the evidences were very plainly manifest. I found her at the time of labor suffering from severe facial erysipelas; features much swollen; eyes closed almost entirely; ears almost double the natural size; skin very red, tense and burning, œdematous and shiny in appearance, extending over the scalp. Associated with these local symptoms, were the usual constitutional disturbances incident thereto, such as high fever, headache, etc. I would add that her lying-in was unattended with an unfavorable symptom; it followed a normal course. As for the erysipelas, it seemed as independent as the parturition, following the natural course of the disease, although several weeks elapsed before desquamation had ceased. The lady is now in excellent health, and in much better condition than for a long time.

The Nature of Snake Poisons.

M. Gautier read before the Academy of Medicine, at the *séance* of July 26 last, an account of his researches into the nature of snake poisons, especially that of the cobra (*Naja tripudians*). He has succeeded in isolating them, and finds them to have nothing in common with ferments, but to be chemical bodies of definite composition and considerable stability, acting with an energy proportioned to the quantity employed; and but slightly impaired by subjection to a temperature of 125° C. (258° Fahr.) for several hours. Having dissolved a milligram of the poison in several drops of water, he inoculated rabbits and birds, who invariably died in a few minutes, the heart remaining in systole and muscular contractility being abolished. He then employed like doses, but mixed with various reputed alexipharmics, for half an hour to an hour before injection. Perchloride of iron and essential oils of thyme, mint, etc., he found to be quite inert. Tannin, nitrate of silver, and liquid ammonia delayed but did not avert the fatal termination. The alkaline carbonates were also useless. But—and here lies the great interest of his experiments—although the poison seems to be of the nature of an alkaloid, it has in its crude state an acid reaction, and a quantity of caustic potash or soda just sufficient to neutralize this acidity rendered it absolutely inert. He also verified the fact that the poison may be taken into the digestive canal with impunity. Subsequent neutralization of the alkali with an acid did not restore the energy of the poison, which would seem to point to decomposition rather than mere neutralization by the potash. He failed to prevent death by subcutaneous injection of alkaline solutions, but he has certainly opened a new path for further experiment, which may lead to great results.

Parotitis as a Complication of Ovariotomy.

Dr. Möricke, in a communication to the *Zeitschrift für Geburtshülfe und Gynäkologie*, narrates five cases in which inflammation of the parotid gland followed ovariotomy, and in four of them went on to suppuration. He refers to the well-known connection between inflammation of the testis and of the parotid gland, and quotes cases from other authors in which affections of the female genitals—swelling of the labia, vulvovaginal catarrh, swelling and pain in the breasts, swelling and pain of the ovary—came on in the course of mumps. He thinks these instances point to a connection between the parotid gland and the ovary, similar to that which exists between the parotid gland and the testicle. In support of this view he further states that he has never seen parotitis follow any other operation on the female genitals, although the operations of this kind which he has done far exceed in number his ovariotomies. In one of his cases there was the possible source of fallacy, that some children suffering from mumps were in the hospital at the time, and a nurse caught the disease. But the ovariotomy case was kept separate from the other patients, had her special nurse, and no other patient in the hospital caught the disease. The criticism that parotitis is not uncommon in the course of the acute infectious diseases (ty-

phus, scarlatina, etc.), and in pyæmia, he anticipates by saying that his patients were not suffering from any of these diseases; nor was the inflammation so acute or so dangerous as is the pyæmic form. In time of occurrence and in frequency it closely resembled the orchitis which complicates mumps. The parotitis came on five times out of 200 cases of ovariotomy, and began from the third to the seventh day after the operation. Orchitis in mumps is said to occur once in sixty cases, and to come on, as a rule, about the sixth day.

Quinine Enemata.

In a lecture on the treatment of malarial fever, published in the *Detroit Lancet*, for October, 1881, Dr. Alonzo Clark, of New York, first draws attention to the quantity of adulterated quinine in the market, rendering it often necessary to administer it in enormous doses. With regard to the methods of administration, he observes:—

I have not become a lover of the hypodermic injection of quinine, for it so very generally has made sores in instances where I have seen it used. If the druggist can prepare it in such a way that there will be no irritation, I would be less inclined to object to it; but I know it is effectually administered by injection into the bowel, and given in this manner it acts, at least, in an innocent way. But it must be given in large doses to be effective. The doses that were employed four or five years ago would seem only to inflame the fever and not to reduce the temperature. It must be used in ten grain doses, three times a day, and you will find that injecting it into the bowel will be just as efficacious as if it were taken by the mouth. The old account of the matter was that a double dose should be given when the medicine should be administered by injection. I do not think so, and I feel quite sure that I can make five or ten grains of quinine, properly dissolved, do just as much for the general system, when injected into the bowel as if it were taken into the stomach. It may not be true of a large circle of medicines, but I am confident that it is of this.

Hospital Treatment of the Insane.

Dr. H. Grimshaw says, in the *Lancet*:

It is all important, I believe, in incipient cases of mental attack, promptly to remove the patient from injurious surroundings; but it by no means follows that a mind trembling in the balance should at once be consigned to an asylum, and so, in reality, it practically comes to this, that dangerous delays occur, and too often disastrous consequences ensue, from crass ignorance how best to act.

Out door treatment might be probationary on the one hand, for incipient cases, experimental on the other, after prolonged seizures, and would be a great boon to many chronic sufferers who, though indubitably insane, are really harmless, and quite capable of enjoying life in a well-regulated and cheerful home.

In cases of a somewhat questionable nature I have found it convenient to try residence in apartments only, at the outset, with an attendant; and then, when society and companionship were deemed desirable, to take the patient into my own house.

Some twenty years ago, I remember, an eminent physician wrote a series of papers in the medical journals very strongly advocating the establishment of Maisons de Santé, where supervision could be exercised without entailing loss of liberty, or the pains, penalties and vexatious formularies following in the wake of lunacy certificates; for, as matters now stand, the patient must be either dubbed insane at the outset or run the risk of continuous out-door treatment by a practitioner whose general line of work hardly fits him for the undertaking, if his professional engagements would allow of it.

A New Method of Treating Subcutaneous Nævi.

Dr. C. Coombs gives this case in the *Lancet*:—

About a year ago, a child aged nine months was brought to me with a nævus about three-quarters of an inch in diameter, filling up the fossa on the left side of the nose. The swelling was entirely subcutaneous, and it was evident that none of the applications which cure the superficial form of the disease would be of any use. The gold needle usually employed in such cases was connected with a battery and introduced into the tumor, but the restlessness of the child (his eye being endangered) made me abandon it. Two lengths of No. 24 silver wire were then passed through the middle of the swelling, parallel to each other, and about a quarter of an inch apart. The zinc and carbon of a Bunsen cell (quart size) was then connected with the ends of each wire separately. The result was great heat in the wire during the short period, one or two seconds, of connection. The ends of the wires were then tightly twisted together, protected by being covered with lint and plaster, and left for the next application, which took place a week later. The current was applied three times altogether. The wires were removed after the third galvanization, and no further treatment was needed. The nævus is now scarcely perceptible.

This mode of using the galvanic current in the deeper nævi appears to me to be recommended by its simplicity and freedom from danger. There is less pain than is caused by the usual introduction of needles at each operation, and a single cell (bichromate, Grove's, or Bunsen's) is sufficient, the only resistance being the fine silver wire.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a reprint from the *American Journal of Medical Science*, Dr. Edward T. Reichert, gives a summary of fifty-six cases of poisoning by carbolic acid, with a study of its physiological action. His results are quite instructive to toxicologists.

——A physician of Buffalo, Dr. Rollin R.

Gregg, has attacked, what he calls "the great bacteria fallacy," maintaining that the so-called micrococci in the diphtheritic membrane are in reality granules, fibrils and spirals of fibrin. It appears that he has written a book on the subject, which, however, we have not seen. From some expressions in the reprints sent us, we judge him to be of one of the "independent" schools of medicine. At any rate, his views deserve consideration.

——The *North American Review* maintains its high level of excellence and variety in its articles. Its contributors are always among writers of original merit, or at least among those popularly supposed to be profoundly learned in their particular branches, and the conflicts of opinion which the *Review* covets, are entertaining and instructive in the sense that they show how little after all is really known on any topic.

BOOK NOTICES.

Transactions of the Louisiana State Medical Society, New Orleans, 1881.

We should at an earlier date have spoken of the Transactions of the Louisiana State Medical Society, but as they are bound up with the regular issue of the New Orleans *Medical and Surgical Journal*, they are apt to be lost sight of in the great stream of periodical literature.

The address of the President, Dr. C. M. Smith, was upon epidemics, and we are gratified to see that it was decided in advocacy of quarantine to the National Board of Health. He said:—

I claim then that quarantine was the barrier which stayed the ingress of yellow fever into the United States during the war, and, if quarantine can prescribe limits to one, it can exclude all diseases from the country that are of foreign origin.

Has not the history of quarantine during the last four years proved that the establishment of the National Board was not only a necessity, but that it is the only authority capable of acting as an arbiter between different States and communities, where there are doubtful or conflicting opinions regarding the necessity of enforcing quarantine restrictions? Its coöperation with State Boards must be entirely harmonious and devoid of conflict, as without this a thorough, safe, and just quarantine will be impossible.

Dr. Stanford E. Chaille read a full report on State Medicine, as applied to Louisiana. Dr. J. C. Egan, of Shreveport, described the occurrence of Urinary Calculus in Northern Louisiana, where it appears to occur very rarely. The article by Dr. Richard H. Day, on the treatment of yellow fever, is positive in its directions, and the result of matured observation. It will be presented in the next number of the *Half Yearly Compendium*, so as to insure it a wider circulation. Dr. M. Schuppert's article on tuberculosis is rather fanciful, and altogether too sanguine. He seems to have caught the *spes phthisica*. A case of retention of menstruation, with regurgitation in the left fallopian tube, is reported by Dr. E. S. Lewis, of New Orleans.

Transactions of the American Gynæcological Society. Vol. 5. For the year 1880. Boston: Houghton, Mifflin & Co. 1 vol. 8vo. Cloth, gilt, uncut. pp. 470. Price $5.00.

The gynecologists must have caught the passion of their patients for sumptuous attire and elegant externals, by the choice appearance of their *Transactions*. It is not often that a scientific volume comes to our table printed on such paper and so artistically manufactured. The articles in the volume are, however, quite worthy of the frame in which they are set. There is no one which does not show signs of careful preparation, and the subjects form a judicious mixture of practical and theoretical gynecology.

The annual address was by Dr. J. Marion Sims, its topic being the growth of the Society and its specialty. Of the other papers we name one on Battey's operation, by Dr. Battey himself; on displacement of the ovary, by Dr. Geo. J. Engelmann; an ethnological study on posture in labor, by the same; the extirpation of an encephaloid kidney, by Dr. W. H. Bifford; uterine massage, by Dr. A. Reeves Jackson; catalepsy cured by trachelorraphy, by Dr. R. S. Sutton; secondary puerperal metrorrhagia, by Dr. Theo. Parvin; the hot rectal douche, by Dr. J. R. Chadwick; laparotomy, by Dr. C. D. Palmer; manual dilatation of the os, by Dr. W. R. Richardson; occlusion of the uterus, by Dr. J. A. Eve; ovariotomy during pregnancy, by Dr. H. P. C. Wilson; and rupture of the uterus, by Dr. W. P. Howard.

It will be seen from this how varied is the entertainment, and we are sure the gynecological reader will find the volume a valuable addition to his library.

Transactions of the Medical Association of the State of Mississippi at its twenty-fourth Annual Session, held at Mexico, Mo., May 17th, 18th, and 19th, 1881. St. Louis: J. H. Chambers & Co., Printers, 405 North Third street. pp. 194.

The President's address, by Dr. J. Mallen, of Liberty, was on "The Need for Thorough Medical Training and Teaching, and the Importance of Local Medical Organizations." Numerous Essays on various subjects were also read, among which we mention "Gastrotomy," by Dr. Frank J. Lutz, of St. Louis; "Fever and the Cooling Bath," by Dr. Willis P. King, of Sedalia; "Connection between Asthma and Nasal Polypi," by Dr. C. A. Todd, of St. Louis; "Spon-

taneous Version and Involution in a Shoulder-arm Presentation," by Dr. W. H. Lee, of Mexico; "Hygiene," by Dr. Garland Hurt, of St. Louis; "Mutual Relations of the General Practitioner and the Specialist," by Dr. Wm. Dickinson, of St. Louis, and others. These were all followed by lengthy discussions, in which most of the members present took part.

Eczema and its Management; a Practical Treatise based on the study of two thousand five hundred cases of the disease. By L. Duncan Bulkley, A.M., M.D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, Out-patient Department, etc., etc. New York: G. P. Putnam's Sons, 27 and 29 West 23d street. 1881. Cloth, 8vo. pp. 344. Price $3.00.

There is no department in medicine the study of which is so neglected by the general practitioner, as that of dermatology, and few physicians, indeed, attempt to treat affections of the skin with anything like the same clear understanding of what they are trying to accomplish, as guides them in the management of other diseases, the majority relying on a few fixed formulæ, and when these fail, the case is either abandoned or sent to a specialist; yet few diseases require a more thorough knowledge on the part of the physician, both as regards pathology and therapeutics, than those of the skin, and, as the author remarks, "Eczema has been rightly called the keystone of dermatology, and he who masters its management is not only skilled in regard to treating the most common and distressing of all cutaneous diseases, but has acquired a knowledge of the principles of dermatological practice which will assist in the treatment of very many, if not all, other maladies of the skin." As editor of the *Archives of Dermatology*, as well as author and translator of various other works on the skin and its diseases, the author is well known to the medical profession, and as a specialist he has had rare opportunities for observation. The work before us is, as the author remarks in his preface, a personal one, representing his own views and experience in the management of eczema, as it occurs both in private and hospital or dispensary practice. A little more than one-third of the volume is taken up in describing, defining and classifying the disease, showing its frequency compared with other cutaneous diseases, and other statistics, bearing on age, sex and conditions in life, which favor its development, duration of the disease, symptoms and pathological anatomy, forms under which it appears, diagnosis and prognosis, together with its nature and the causes which produce it. The remaining two-thirds of the book is devoted to treatment, remedial, dietetic and hygienic. The author regarding eczema as a constitutional disease, of which the skin lesions are the outward manifestations, this treatment should be both general and local, and here, as in other diseases, the physician should be guided by circumstances in the selection of his remedies; the condition of the patient should be taken into consideration and all departures from health should be looked into and rectified. The author knows of no specific, and warns against the common error of regarding arsenic as such. In regard to treatment he enters most minutely into details, and in such a clear manner that whoever has read his directions cannot but grasp the principles that guide him, and will have no need of blindly following dogmatic rules. The chapter on diet and hygiene is equally comprehensive. A formulary is also appended, giving the combinations most frequently used by the author. These are not intended to be used as fixed formulæ, but only to represent the average method of use of the remedies which are of service in eczema, and must be altered to suit the case in hand. The whole work is fascinatingly interesting, and we recommend it to the general practitioner, for whom it is chiefly written, as a most valuable guide to the intelligent treatment of one of the most frequent as well as troublesome of skin affections.

A Manual for Hospital Nurses and Others Engaged in Attending on the Sick. By Edward J. Domville, L.R.C.P. Lond., M.R.C.S. England; Surgeon Exeter Lying-in Charity, etc. etc. Fourth Edition. Philadelphia: Presley Blakiston, 1881. Small 8vo, pp. 96. Price 75 cts.

This little manual is divided into four parts, treating respectively of the nurse's duties toward herself, her superiors, her fellow-nurses and servants, and her patients. Part IV, which takes up the larger portion of the work, is again divided in two sections. Section I contains minute instructions as to the management of ordinary cases, with full directions about ventilation, the management of the fireplace, bed-making, washing, dressing and feeding patients, the dressing of wounds, administration of medicine and other remedial agents, the laying out of the dead, and preparation for post-mortem examination. In Section II we find similar directions for the management of extraordinary cases, such as accidents of all kinds, preparing for operations, and the treatment of hysteria, epilepsy, paralysis and fevers. To this is added an appendix, containing valuable directions for preparing remedies, food, etc., with table of weights and measures, and a glossary of medical terms. Nurses will find this book very useful.

THE

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PROGRESS OF THE MEDICAL EDUCATION OF WOMEN IN EUROPE.

In spite of tacit or outspoken opposition there is, year by year, a steady though slow increase in the encroachment of women on our profession. They were not admitted as delegates to the last International Medical Congress, owing, it is whispered, largely to the determined opposition of her august and imperial Majesty, Queen Victoria, who is too staunchly conservative even to approve of the education of her own sex. It is said that she intimated that she should "withdraw her patronage" from the Congress if a single petticoated delegate was admitted. What terrible results would have followed such action on the part of her Majesty we are not informed, but it seems to have been taken for granted, all round, that it would have been something very frightful indeed. Perhaps the 3000 learned men who had there assembled would have been struck dumb, which would have been about the greatest affliction to them, on the occasion, which occurs to our imagination. Think of the disastrous effects of having to carry back the pent up and bottled eloquence with which each one came prepared!

The Queen, however, either followed a pretty general sentiment among British physicians, or else, because it is her sentiment therefore it is general; not an unlikely suggestion. It is exhibited in an address delivered last winter by that genial and learned physician, Dr. THOMAS MORE MADDEN, of Dublin, an extract of which we append, as being quite exquisite in its way. The Doctor said:—

In Dublin we have, up to this time, escaped any permanent settlement of those erratic medical hybrids, the lady doctors, despite the encouragement afforded them by the Irish College of Physicians, in their hopeless contest against Nature's laws. That some women have passed unscathed through the ordeal of studentship—to which none of you would wish to see any lady of your own families subjected—is, I am sure, true; and that a few of these persons have shown considerable medical ability is beyond doubt. There are some masculine women, just as there are some effeminate men. Neither are good types of their kind; and it needs no serious argument to prove the futility of any attempt founded on such exceptional cases, on the part of either sex, to fill the place and assume the functions of the other.

Nevertheless, right in Great Britain these "erratic hybrids" appear to be gaining ground, with a singular indifference to "Nature's Laws;" although, perhaps, Dame Nature, who is generally supposed to be a lady even more potent than the Empress of the Indies herself, has not fully informed Dr. Madden what her laws are on this particular subject; perhaps he has substituted for her laws some obstinate old prejudices, which are the private personal property of Dr. Madden, and possibly Dame Nature would smile broadly to be told these ancient and now rather battered articles were her divine and unchanging laws.

However that may be, the work goes on. We note in our recent English exchanges that last month the inaugural address of the eighth winter session of the London School of Medicine for Women was delivered by Miss ANNIE REAY BARKER, M.D., who gave a concise sketch of the history of the movement for the medical education of women, and then congratulated the students

on the way in which they had worked to maintain its dignity and reputation, and especially called attention to their achievements at the recent examinations of the London University, when Miss Frances Prideaux took the gold medal and exhibition for anatomy.

Miss Barker said that, not only were the ladies working well as students, but they were beginning to spread themselves gradually and quietly over the country, becoming centres of usefulness in the towns in which they established themselves, and thus supplied a need which was making itself more apparent, now that there was a possibility of obtaining the help of skilled women doctors. Of the twenty-six ladies now on the register, twelve were practicing in England and Scotland. Dispensaries for women and children have been founded by lady practitioners at Manchester, Leeds, Bristol, and Edinburgh, and in the most recently founded, that at Manchester, by Dr. Anna Dahms, the number of patients had so far outstripped the power of one practitioner, that the small fee charged for each visit had had to be raised to keep it within bounds. A Provident Dispensary had been established at Notting-hill, of which Mrs. Marshall, M.D., was the medical officer. Miss Barker bore personal testimony to the progress that had been made in Birmingham, and expressed her pleasure in speaking of the fairness, practical good sense, and kind feeling with which medical women had been received there. The prejudices against women doctors must, Miss Barker told the students, be overcome, not by showing ill-will in return, but by honest, true work, and by showing that though they have entered a profession, they have lost none of the refinement and dignity of true gentlewomen.

On the continent also there is activity in this direction. In the Russian medical journal, *Vratch*, Dr. Hertzenstein, devotes an article to medical education in regard to women in Russia, from which we learn that since the St. Petersburg school of medicine was opened to women, in 1872, 796 students matriculated; 72 per cent. of the pupils were under 22 years of age; between 22 and 30, 24 per cent.; above 30, 3 per cent. According to social condition, they are classified: single, 89.4 per cent.; married, 9 per cent.; widows, 1.6 per cent. As the course of studies is five years, only the first three classes had graduates; their number is 111, corresponding to 266 matriculates. During 1879, 453 students pursued the study of medicine, and as 111 graduated and 30 died, 202, or 25 per cent. abandoned their studies. This large percentage is due to the fact that the majority of students are obliged, while studying, to earn their living by giving lessons, literary work, etc., a condition not favorable for a steady study of five years.

Notes and Comments.

On the Communicability of Tuberculosis.

In a recent number of *Deutsches Archiv für Klinische Medicin* Dr. Tappenheimer, of Meran, gives the results of a series of carefully conducted experiments, extending over a period of four years, and undertaken for the purpose of ascertaining by what means tuberculosis may be communicated from man to man. Having already, in 1877, established the fact that the inhalation of finely pulverized tuberculous sputa invariably produces pulmonary tuberculosis in previously healthy dogs, he naturally concluded that this might be one of the means of infection in the human species. His attention was next directed to the alimentary canal as a point of entrance of the infectious particle, but repeated experiments with dogs fed on food mixed with the sputa of tuberculous patients gave only negative results, and although he does not deny that this may be an occasional mode of infection, yet he thinks that when such is the case there may have been an abrasion somewhere along the alimentary canal, and that the infectious particles have been communicated by inoculation. Next, in order to settle the question as to whether by the coughing of consumptives minute particles of infectious matter are not thrown into the atmosphere and there suspended to be inhaled by others, he confined two rabbits in a small box provided with an aperture into which he had a patient cough, whenever so inclined in daytime, for two months, at the expiration of which the rabbits, that apparently had remained perfectly healthy were killed and examined, without any trace of tubercles being found. The communicability of tuberculosis being, however, an indisputably established fact, the author comes to the

conclusion that, as infection unquestionably takes place through the inhalation of minute particles suspended in the air, and as no such particles capable of communicating the disease are thrown off by coughing, only one theory remains tenable, viz., that the sputa of tuberculous patients falling on floors and carpets, there dry and are pulverized by being walked on, and being subsequently raised with other dust on sweeping, they are again inhaled by persons in the room. Further experiments are being made by the author, who promises to communicate the results later on.

Perforation of the Intestine by Ascarides Lumbricoides.

Dr. E. Marcus, of Frankfort am Main, reports in *Deutsches Archiv für Klinische Medicin*, the case of a girl, aged thirteen and a half years, of healthy family, but since her fifth year excessively given to the practice of Onanism, for which various kinds of vermifuge had been frequently prescribed without any worm having ever been observed in her stools. In the morning of April 7th she had gone to school in her usual good health, but returned home at noon complaining of severe pains in the abdomen, which in the course of the afternoon gradually increased. She also vomited several times, a greenish substance. In the evening, when the Doctor was called, she was in such pains that an examination was impossible. The bowels were moved with an enema of ol. resini. The next day the abdomen was greatly distended, and painful to such a degree that it could not be touched. The face was pale, pulse small, and feet cold. Perforative peritonitis was diagnosed. After seven days of terrible suffering she died from collapse. At the autopsy, twenty-eight hours after death, an enormous quantity (considerably more than one gallon) of highly offensive pus was found in the peritoneal cavity, but no fæces. Between the intestinal convolutions were found three large round worms, two of which were dead, while the third showed signs of life. In the descending portion of the duodenum, about 4½ cm. below the first flexure, was found, on the inner side, a perforation of about 6 cm. in length. Such cases are unquestionably rare.

Treatment of Diphtheria with Ice.

M. de Bleynie affirms that the results he has obtained from this treatment during the past sixteen years permit him to affirm that "diphtheria treated with ice is constantly cured."

The following mode of administration is recommended: 1st. Introduce into the mouth of the little patient a small fragment of ice every ten minutes, without any interruption, whether the child is awake or sleeping. Young sleeping children absorb the ice without awakening. The fragment of ice should be swallowed when it is almost melted. 2d. Do not cease giving ice until the false membranes have entirely disappeared; this happens from the second to the eighth day. 3d. Keep good watch over the throat, and if the membranes reappear, recommence the treatment, and in fact for some days it will be better to continue giving ice every half hour, lengthening the intervals each day. 4th. From the beginning give wine and good nourishing food.

Treatment of Hiccough.

As a general rule the various antispasmodics (*le Medecin Praticien*) have been put in use in obstinate hiccough; the extracts of hyoscyamus and belladonna, valerianate of zinc, etc. The following prescription, due to Dr. Park, has very frequently given good results:—

℞.	Potass. bromid.,	ʒj	
	Tr. sumbul,	ʒss	
	Tr. hyoscyami,	ʒj	
	Aquæ camphoræ,	ʒj–ʒvj.	M.

Sig.—Tablespoonful every two hours.

M. Marage recommends chloroform, as in the following mixture, by spoonfuls every three hours:—

℞.	Syr. diocod (Fr. cod.),	30 grams	
	Syr. menth. piper. (Fr. cod.),	12 grams	
	Chloroform,	2 grams	
	Ol. amyg. dulc.,	60 grams.	M.

Gola has employed, with success, sulphuric acid, 4 grams in 500 grams of water; Juaritz' infusion of mustard.

Topical applications, acupuncture, rheophores, to neck and diaphragm, etc., should be reserved for very obstinate cases.

Ovarian Tumor in a Hen.

At a recent meeting of the St. Louis Obstetrical and Gynæcological Society, reported in the *Obstetric Gazette* for August, 1881, Dr. Engelmann exhibited an ovarian tumor taken from a hen. There were two tumors; one was rather larger than a large-sized orange, and the other smaller—about the size of an egg. It was a hard mass, in very distinct layers, of brick red and orange color, but apparently not forming a distinct tissue—containing no blood vessels. The centre of the tumor did not seem to be an organ-

ized mass, but a hollow cyst, surrounded by a dense conglomerate and inorganic mass. Comparatively speaking, it was a very large tumor, its weight being considerably greater than that of the body of the majority of hens.

Treatment of Vulvar Pruritus.

Vulvar pruritus is one of the most obstinate affections that one can have to treat. In the *Jour. de Méd. et de Chir. Pratiques*, we learn that M. Besnier, after trying all forms of application in a case at the St. Louis Hospital, found that most benefit was obtained from the following unguent:

℞. Ung. diachylon simpl. (Fr. cod.),
Ol. olivæ, āā equal parts. M.

On the other hand, M. Delaporte, recommends, in the same pruriginous affections, the following lotion:—

℞. Sodæ carbolat., ℥ss
Aquæ Colon., ℥iiss
Glycerinæ, ℥iiiss
Aquæ, ℥x. M.

Lotions with this wash should be made whenever irritation is intense, and particularly at bedtime. The liquid should be applied cold, with a fine sponge.

Carbolic Acid in Whooping Cough.

Dr. J. Baugh states, in the *Canada Lancet*, Nov. 1, 1881, that having recently had several patients suffering with whooping-cough, and having administered the usual remedies without getting the least benefit, he commenced giving carbolic acid and glycerine, in small doses, repeated every hour, which treatment yielded very satisfactory results. The paroxysms of coughing and the vomiting, which in some cases were very severe and frequent, were reduced almost to a minimum in less than twenty-four hours. For a child three years old he gives the following:—

℞. Acidi carbolici, grs. iv
Glycerini, ℥iss
Syr. simp., ℥iv
Aquæ ad ℥ij. M.

Sig.—A teaspoonful every hour.

Treatment of Tertiary Syphilis.

M. Hardy, as we read in *la France Médicale* uses very frequently the following solution:—

℞. Potass. iodid., ℥vss
Hydrarg. biniodid., gr. ij
Aquæ destil., ℥x. M.

Of this solution a tablespoonful may be taken at first, one in the morning, another at evening.

This solution replaces, advantageously and economically, Gibert's syrup, and is not liable to undergo alterations like this last.

Special Reports.

NO. XIX.—LARYNGOLOGY.

Numerous and acute observers are making the subject of laryngeal disease a special study, and their results have already led to a complete revolution in the diagnosis and treatment of many of this common class of maladies. From the considerable literature of the branch we shall cull a series of observations most interesting to the profession at large.

REST IN THE TREATMENT OF LARYNGEAL DISEASE.

How and how far to secure rest of the part in these diseases, was discussed last winter in a paper by Dr. Beverly Robinson. The functions of respiration and phonation demand the constant action of the intrinsic laryngeal muscles. To control these actions as much as possible, is to secure the best possible conditions for cure. After insisting upon the advantage of rest in acute and chronic laryngitis, the author recommends, in subacute cases, that "a happy medium" course of treatment should be observed, not allowing the voice to grow rusty, but, at the same time, limiting the vocal work to slight and occasional efforts. The working of the larynx should be carefully watched. If the cords cannot approximate the middle line, but leave a slight oval chink between them, complete rest is enjoined. Intralaryngeal appearances sometimes lead into error of treatment. In some patients whose vocal cords invariably appear red and inflamed, but who are still capable of producing accurate and full notes, the moderate use of the voice is beneficial; in others, in whom the mucous membrane is only slightly reddened, but the muscles are incapable of proper motion through loss of contractile power, owing to intercellular infiltration and consequent compression of the peripheral nerve fibres, singing and talking should be forbidden.

HYSTERICAL AFFECTIONS OF THE LARYNX.

A translation of an interesting article on these affections, from the French of Dr. Thaon, of Nice, is given by Dr. Duncanson, in the Edinburg *Medical Journal*, October, 1881. The article has appended to it a very excellent bibliography of the subject, which will prove a great help to students. We select some of his more interesting observations:—

Hysterical Aphonia, is caused by paralysis of

the muscles of the larynx. The muscles most commonly seized are the vocal muscles. Nevertheless, paralysis of the posterior crico-arytenoids is not absolutely rare, and we have known a case of this kind in which a hysterical female has been twice tracheotomized. A primary symptom of hysterical paralysis is that it is frequently bilateral, or else the paralysis is one-sided, but complicated with paresis or contraction of the opposite muscle. Thus hysterical aphony is often complete. It is, besides, a common enough occurrence, this diffusion of hysteria in organs which are impaired, and which are not symmetrical, as the ovaries.

A second symptom of hysterical aphonia is, that it frequently gives a laryngoscopic image differing the one day from the other.

A third characteristic is to leave the cough intact, which even gains in intensity and breaks forth into roaring. We have even seen some cases of hysterical aphonia where the patient could sing, and some who could speak in their dreams.

Spasm of the Larynx.—The hysterical laryngeal spasm has its characteristics which distinguish it from the spasm of infancy, from the spasm from an irritation of the vagus nerve or of the recurrent, and from the spasm from the introduction of a foreign body into the larynx. This spasm is expiratory or inspiratory. The expiratory spasm is nothing else than the whimsical cough of the hysterical, a symptom common to nearly every hysteric, but a symptom the most painful. In a boy fourteen years of age we have counted as many as twenty-five coughs per minute during weeks. This child was cured by a heavy rain which overtook him during a walk, and to which he was exposed for two hours. At other times the hysterical cough is cured by the intercurrent affection which has been its primary cause. We know the fortunate consequences of the cure of uterine maladies from the hysterical cough. This hysteric cough was the cause of many errors being made before the laryngoscope had unveiled the exact state of the larynx. When it is met with in young girls, associated with supplementary hæmoptysis, it gives rise to a prognosis of which the gravity is only apparent.

Laryngeal Hyperæsthesia. Hysterical laryngeal hyperæsthesia is very common; it is, perhaps, the most frequent manifestation of hysteria in the larynx. Sometimes it is diffuse, and manifests itself by various sensations—sensations of burning, tearing, pulling, going from the throat to the sternum, sensations of a foreign body. Who does not remember being called out in great haste to see a woman who had swallowed a pin, a fish-bone, etc., and who was in the greatest agony. After a conscientious examination, we find that the patient has been mistaken by a false sensation, and that we, ourselves, have been the victim of a false alarm. But it is not always easy to convince these same subjects that it is not rare to find among them veritable cases of laryngeal hypochondriasis.

Laryngeal Anæsthesia.—The result of our inquiry on this subject is, that in only one-sixth of hysteric patients we have met with more or less complete anæsthesia of the epiglottis. It is the epiglottis which is frequently attacked by anæsthesia, and frequently to the exclusion of every other part. Anæsthesia may have completely mastered the whole of the larynx, and be absolute. Generally it is bilateral, and is not limited to any well-defined nervous territory. This characteristic sometimes sufficiently distinguishes it from other anæsthesias, which are as extensive as one of the areas of one of the superior laryngeal nerves, such as diphtheritic anæsthesia. Another important and special characteristic of this anæsthesia is that it is frequently associated with a cutaneous patch of anæsthesia on the front of the neck, a peculiarity already noticed with reference to hysteric aphonia. The simple introduction of the mirror is sufficient to cause many of these anæsthesias to disappear.

CHOREA OF THE LARYNX.

Under this name, Prof. VOLTOLINI describes a curious case in a 12 year old girl (*Schmidt's Jahrbuch*, No. 1881).

She suffered from an obstinate cough all winter, and suddenly, in the spring, was seized with an inability to cough and violent strangling whenever she attempted it. She gasped, became blue, and seemed on the point of asphyxia.

Having been treated in vain by the local physician, she was taken to VOLTOLINI, who found the larynx entirely normal, and during the examination the child coughed naturally. Deciding that it was a case of disordered innervation, she was treated with bromide of potash and faradization, and gradually improved.

ANÆSTHESIA OF THE LARYNX.

After much experience, Prof. SCHRŒTTER has adopted the following plan for producing anæsthesia of the larynx (*Wiener Med. Zeitung*, March, 1881).

The day before the operation the larynx of the patient is painted twelve times with pure chloroform, the object of which is to produce a hyperæmia of the mucous membrane, and so prepare it for the reception of the narcotic. This lasts from seven to nine minutes, and, as it causes a violent burning, is the most disagreeable part of the operation. After an hour, twelve paintings of concentrated solution of morphia (muriate of morphia, 1 part; distilled water, 10 parts) are applied, the patient being told to expectorate after each application, and thoroughly cleanse his mouth and throat with a tannin gargle. He then sleeps, but must be watched during the night by the physician or other competent person, with proper antidotes (such as tea, coffee, etc.) in readiness. Dr. Schrœtter has, however, found that when the proceeding has been conducted with the above caution, there have not been any symptoms of poisoning, or, if any, but very slight. The larynx, by eight o'clock the next morning, has usually become so insensitive that the operation may be at once proceeded with. Occasionally, the morphia application has to be repeated. Excellent as Dr. Schrœtter considers this method to be, he does not make

use of it often, for the reason that it is seldom necessary. For the removal of polypi, etc., a preliminary practice of introducing the sound a few times is sufficient. The painting with the chloroform is so disagreeable a proceeding, that he does not willingly resort to it.

NEURALGIC ANGINA OF THE THROAT.

This not very rare affection has been recently described by two writers, Drs. SAINT PHILIPPE, of Bordeaux, and HUCHARD, of Paris (*London Medical Record*, June, 1881). It is an affection of the throat, characterized by a severe lancinating pain with throbbing like that of an abscess, while there is nothing to be seen except a little redness, and very slight, if any, swelling. There is no ulceration nor glandular enlargement. The pain is only slight in the morning, but comes on with severity in the middle of the day, and becomes intolerable at night. The pain persists in spite of gargles. This angina, like orbital neuralgia, may occur after a diffuse catarrhal inflammation. The neuralgic nature of the angina is shown by the treatment; two days being sufficient to mitigate, if not to completely relieve, the pain. Dr. SAINT PHILIPPE prescribes 8 to 10 grains of sulphate of quinine, to be taken two hours before the crisis, in the middle of the day, and sustains the action of the first dose by a smaller quantity, 4 to 5 grains given in the afternoon.

Dr. HUCHARD says of it:—

1. There is a great disproportion between the intensity of the pain and the slightness of the hyperæmia and swelling. 2. The hyperæmia is subordinate to the neuralgia, the latter preceding and perhaps following the former. 3. The pain has special characters. 4. Treatment by gargles is insufficient; and the best effects follow antineuralgic treatment, viz., sulphate of quinine and paintings with glycerine and morphia.

CATHETERISM OF THE TRACHEA IN CROUP.

A correspondent writes to the *British Medical Journal*, June, 25, 1881, that he was called to a girl, 2½ years old, for croup.

It was evident by the pulse, which was about 150 and almost imperceptible, that unless some relief could be given, the end was not far off. The face gradually became pale, and wore a distressed expression, and the lips were of a livid blue color. As the mother objected to tracheotomy, and as emetics, hot bath, and the ordinary routine treatment, had been previously tried, I introduced a large (No. 12) gum-elastic catheter into the trachea, with less difficulty than I anticipated—having first gagged the child's mouth with a cork, for want of something better, and depressed the tongue with a spoon. After a severe paroxysm, she succeeded in getting a pretty good breath, and the next expiration was followed by the ejection of muco purulent *débris* and sticky phlegm through the tube. In about ten minutes these convulsive efforts ceased—the child, in the meantime, getting a good amount of air into her lungs. In half an hour her face was flushed, but had lost its lividity, and the breathing was fairly comfortable. The tube was retained by tape tied round the child's neck, and was removed twenty-four hours after its insertion, when the temperature had fallen to 100° Fahr. and the pulse to 110. Five days later she was running about the house, not much the worse for her dangerous illness. I observed hardly any difficulty in swallowing liquids after the first two or three attempts, when the tube had been introduced.

RELAXATION OF THE UVULA.

An article on this subject is condensed by Dr. LENNOX BROWNE, in the London *Medical Record*, from the original of Dr. LABUS.

Dr. LABUS finds that relaxation of the uvula is a by no means unusual cause of impaired voice, and considers that it deserves a greater degree of attention than it has so far received, and especially because it is often overlooked. Disorder of phonation from this cause is due not so much to elongation of the uvula as to the difficulty which, on account of its relaxed condition, the subject experiences in making various necessary movements of the soft palate during the formation of different sounds.

Singers suffering from an unduly relaxed uvula complain that the voice has lost in strength, and become hollow and thin, and of inability to preserve an even coloring during emission of certain notes in the middle and upper registers.

Relaxation of the uvula is of two kinds, of which infiltration and hypertrophy of the submucous tissue is the kind most commonly seen, accompanied not unfrequently by hypertrophy of the azygos muscle; the second kind is due to paresis or even complete paralysis of the same muscle. It is this last-named form which often escapes observation, for the uvula is apparently in a normal condition, and the laryngoscopic mirror, applied to discover lower down the voice-defect, conceals the fact that the uvula remains immobile during production of the emitted notes.

Among exciting causes must be noted the diffusion of a coryza, irritations produced by alcoholic drinks, and particularly by tobacco, weeping, singing from the throat, and abuse of the timbre sombré.

From his experience, Dr. LABUS believes only in a radical cure, namely, that of removal of so much of the relaxed uvula as is deemed necessary, according to the varying condition in each patient. In no case should the ablation be entire, but merely sufficient to restore to the

resonating portion of the organ its normal volume and form. He has performed many of these operations, and has never observed a deterioration of the voice, but on the contrary his patients have almost invariably assured him of an amelioration.

(To be Continued).

Correspondence.

An Aneurism of the Superficial Palmar Arch Caused by a Catfish Fin.

Ed. Med. and Surg. Reporter:—

On May 22d, 1881, L. P., while fishing, caught a small catfish. In attempting to unhook it he was finned in the palm of the left hand. The small wound bled very freely, in a steady stream, and was extremely painful. The hemorrhage was easily controlled by slight pressure, though the pain was so severe that he "paid but little attention to the bleeding."

He first applied a cloth saturated with turpentine, and later in the day, the pain continuing, he began poulticing. The hand was poulticed continuously from the 22d to the 30th, going through the whole list of household poultices of any repute in the neighborhood. After the first day there was no hemorrhage for some time. Continuing to suffer from a throbbing pain, he concluded on May 30th, to seek medical advice.

Presenting himself at our office on that day, my partner, Dr. J. E. Hill, and I, found upon examining the hand, a small pulsating tumor located in the course of the superficial palmar arch to the radial side. The tumor was about the size of a small acorn, and the pulsation could be seen as well as felt. The pulsation could be stopped by pressure on the brachial artery, and the tumor would then empty itself. Direct pressure on the tumor would empty the sac, and cause all pulsation to cease. There was the "cutis anserina" appearance of the hand from the continued poulticing. Pain was marked. Patient looked haggard and worn. We decided to apply direct pressure to the aneurismal tumor, and attempt to relieve and effect a cure in that way, not being willing at that time to subject him to any operation by ligation. A compress was made, carefully fitted directly over the aneurism, and snugly covered with a roller bandage. An injection of morph. sul. gr. ⅓ was given, and the patient sent home with directions to loosen the bandage, if absolutely needed, and to return at once to the office; but if the circulation continued good enough to keep the fingers warm, to return within a week.

June 1st. Returned, having been compelled to loosen the bandage. This was readjusted, morphine directed and patient sent home.

June 5th. Patient reported again. We removed the bandage and examined the hand. Pulsation had decreased fully one-half. Reapplied the compress. Directed morphine pro re nata; to carry the hand in a sling, and under no circumstances to use it.

June 9th. Returned. The hand had felt so much better that he had used it, and as a result was suffering more. Bandage and compress removed. Pulsations as marked as ever; some extravasated blood in the tissues. Reapplied bandage, etc., and again cautioned him against the use of the hand.

June 13th. Returned; pulsation less; continued treatment.

June 15th. Returned. On the 14th hand had felt so much better that he had gone to the field overlooking some work; had fallen down, and in falling caught on the hand; a slight hemorrhage had occurred, and he had suffered much pain from that till now; bandage and compress were removed; free arterial hemorrhage took place, which was easily controlled by pressure on the radial or brachial artery. Decided to operate at once, and insomuch as the sac was ruptured, to tie the palmar arch: compress and bandage reapplied, and an Esmarch tourniquet tightly covered over that, the patient in the meantime being put under the influence of chloroform and thoroughly anæsthetized. An incision two and-a-half inches in length was made in the palm of the hand, just over the aneurismal tumor, and carried down to the superficial arch, where the sac was found. The sac was laid open, and a firm coagulum turned out, showing the wisdom of the first course of treatment. A ligature was passed on the radial side of the sac, but so tied as to include the sac in the loop. The tourniquet of the Esmarch's bandage was loosened, and free oozing took place, the first drop of blood that had been lost up to that time. This continued for a few moments, causing some apprehension of the failure on the part of the ligature, but position, slight compression, and free application of cold carbolized water, stopped all hemorrhage. The wound was closed with carbolized silk sutures, dressed with carbolized cloths kept wet. The larger portion of the wound healed by first intention. The case is reported to show the good results that might be obtained in small aneurisms, although traumatic, by pressure, if perfect rest could be attained and preserved; and when that fails, the importance of ligation of the palmar arch before tying either the radial or brachial artery, as taught in most of the text books.

T. J. Happel, M.D.

Trenton, Tenn.

News and Miscellany.

Results of the Contagious Diseases Act in England.

As our readers know, this is an Act to prevent the spread of syphilis. Its workings are briefly summed up in a recent address by Dr. G. P. Field, of St. Mary's Hospital Medical School, London, as follows:—

The Contagious Diseases Act is still on its trial, on its original limited scale, at the larger naval and military stations. It has been the case now for many years, again lately shown by Surgeon-General Lawson, before the Select Committee of the House of Commons this session, that the amount of primary venereal disease is considerably less than half at the stations under the Acts, as compared with those not so protected. But, in addition to this, and what is of still more

importance, the number of admissions for secondary disease has been shown to be during recent years as much as 40 per cent. less at the protected places than at the others, where it has remained as nearly as possible stationary. It would be of incalculable advantage to the public if these Acts could be extended to all the large centres of population. Seaport towns, such as Liverpool and Hull, are known to be hotbeds of venereal disease of all kinds. It is impossible, however, in the face of the fanatical and unreasoning opposition which is still being carried on, to hope that much can yet be done in this direction. The Anti-Contagious Diseases Acts Association, as shown before the Committee of the House of Commons, collects £3000 a year to carry on the agitation.

The opposition is similar in character to that which prevails against vivisection and vaccination, and is almost confined to places far away from the working of the Acts, where there is an almost complete ignorance as to their operation and effects. The testimony given this session from places where these measures are in operation is overwhelming, not only as regards the diminution of disease, but the improved condition of the towns, in the suppression of street solicitation, riotous demeanor, etc. Clergy of all denominations have given most striking evidence to this effect, as well as to the facilities afforded for the reformation of fallen women and the suppression of juvenile prostitution, which they find now to be almost a thing of the past. It would be well if the profession generally would make themselves more familiar than they are with these facts, so as to be able when opportunity offers to guide public opinion in the right direction.

Sanitary Condition of the Panama Canal Laborers.

A letter from Panama, October 6th, gives a doleful account of the condition of health among the employees on Lessep's canal. The writer says: Within the last week five canal men, French, have died of yellow fever in the Foreign Hospital in this city, and there are many suffering from the same cause. Two Sisters of Charity who recently arrived from France have also succumbed to the fever. Capt. Bennett, of the American whaling bark Matilda Sears, who arrived a week ago, died of yellow fever at the Grand Hotel, on the morning of the 3d instant.

Gen. Gabriel Neird, died of smallpox at Penomene, on the 15th ultimo. There have been upwards of 1000 fatal cases in that small village within the past three months. The people refused to be vaccinated, and they died like rotten sheep. In many of the small thatched houses whole families have died. There is no medical aid to administer to the relief of their suffering. A member of the Panama Canal Company, who has visited several stations on the line, says there are about sixty cottages erected, and two wooden bridges in course of construction, and that the entire line from Panama to Gatun, seven miles from Aspinwall, has been cleared and is ready for operation. Very little more can be executed before the end of the wet season, which will be in December. Many laborers have arrived from Port Lima, and quite a large number are expected from Jamaica and the other West India Islands. At Gatun they are having some sixty houses erected, besides a hospital, workshop, blacksmith shop, and other necessary conveniences for mechanics and laborers. Already a French doctor has taken charge, besides a full complement of efficient nurses, who will give their special attention to the sick, and make them as comfortable as possible.

There is little doubt, from these and other reports we have seen, that there is a sad lack of proper sanitary provisions for this undertaking. It is certain that if such neglect continues it will foil the best attempts of the engineers to complete the work.

Dividing the Business.

The Parisian municipal authorities have presented a new law for consideration by the Chamber of Deputies. The first clause enacts that henceforth no one shall be permitted to practice both medicine and pharmacy. This is aimed at a class of practitioners who drive a flourishing business by giving gratuitous consultations in their back parlors, and furnish the medicines at a remunerative rate in their shops. The second clause forbids the sale or advertisement of all preparations not inscribed in the Official Codex, and if passed would be a deathblow to secret and proprietary remedies, which could only be delivered on the production of a prescription. It has been suggested that if the Chamber of Deputies should happen to be in the humor for medical reforms, an additional clause might well be framed forbidding instrument-makers to meddle with surgery. In Paris, as elsewhere, there is a very prevalent idea among manufacturers of surgical appliances that they are the proper persons to take charge of orthopædic cases. It would be well if a short legislative measure could do justice to this and other popular errors touching the fitness of unprofessional persons for medical functions.

The Struggle for Life.

An English pharmacist, Mr. B. S. Proctor, writes, in the *Pharmaceutical Journal*, some observations about the struggle for success among the English druggists, so curiously similar to some we reported editorially a few months ago in reference to American physicians, that we must quote a few:—

"The difficulty is, how is a druggist to find customers enough to keep himself fairly occupied in handing out the goods and taking in the money. It can only come about by a large reduction in the number of druggists.

"I long for the millennial happiness of the time when men will have the certainty of an income proportionate to their conscientious and intelligent performance of duty, without the savage struggle to cut the throats of their neighbors. It is not a pleasure to me to do a little murder, but I cannot rid myself of the conviction that life is like a battle of hungry rats.

"According to the laws of nature and the constitution of the world we must eat our neighbors, or they will eat us. The best thing we can do is

to eat them, with all the civility and politeness imaginable, and when we have finished our repast, express our thankfulness in the words of the unsophisticated cannibal who ate the missionary and said he was a very nice man.

"At present, success in trade depends too much upon the valuable art of lying. I have no doubt any professor who could guarantee high proficiency in this art would meet with many pupils. Any man can grow strawberries and tell you they are very fine, but it is only a select few who know how to advertise them 'as large as hedgehogs and twice as sweet.'

"With pharmacists the times must be considered not only chronically, but essentially bad, so long as the number of pharmacists is twice as large as there is pharmaceutical employment for, and, as I said before, they do not like the low profit trade—it is unprofessional."

The Progress of Cremation in Europe.

At Copenhagen, at the last meeting of the Society for Cremation, the Secretary-General announced that the Society counted 1400 members, among whom were 83 distinguished physicians, and many Protestant ministers of well-known character. The apparatus adopted by the Danish Society can complete cremation in about an hour, and the operation does not cost more than from five to seven shillings. It is expected that this economical result will assist in extending the practice among the poorer classes, for in Denmark the cost of a funeral by the ordinary method is very high. In Italy, we learn from the same source (*Revue d'Hygiène*), as the result of a series of lectures in various cities of Europe, by the zealous propagator of cremation, Dr. Pini, new societies have been formed, which now number nine in all Italy; and new crematories have been constructed in Rome, Varese, Pavia, Cremona, Udine and Leghorn. A Milanese gentleman, Signor Loria, has offered the municipality of that city twenty thousand francs to establish and keep up, as a cemetery, a chamber in which the necropsy of bodies destined to be cremated shall be made, especially in cases where the malady has not been rigorously diagnosed, or where death has been in any way sudden, or its cause not certainly known. In Hungary, the sanitary town of Buda-Pesth has published, on the 5th of September last, a report, in which it declares incineration "salutary from the point of view of public health; but it should be permissive only, and a special cemetery set aside for the purpose". The committee strongly recommends the municipality to make the necessary arrangements for putting the project in execution.

The Compensation of Expert Witnesses.

A collection of decisions was not long since made by Dr. Stanford E. Chaille on the question, whether a court can force a medical expert to testify without securing him adequate compensation.

The following facts are pertinent to this question: English courts have decided that a scientific expert need not attend a subpœna, that his testimony cannot be forced, and that he must be compensated. In 1877 the Supreme Court of Alabama decided to the contrary; but, also in 1877, a circuit court of West Virginia concurred in the English view; in 1878, Judge Clark, in the case of the "State of Texas vs. Jasper Weathers," decided that he "knew of no law to force a physician to attend court, and testify as an expert, without compensation;" and also in 1878, the Supreme Court of Indiana, reversing the decision of a lower court, maintained the expert's right to compensation. The Iowa Code of 1873, page 593, sec. 3814 (and probably the laws of some other States), wisely provides that "witnesses called to testify only to an opinion, founded on special study or experience in any branch of science, or to make scientific or professional examinations, and to state the results thereof, shall receive additional compensation, to be fixed by the court, with reference to the value of the time employed, and the degree of learning or skill required."

This law grants all the medical profession demands, and its enactment by the General Assemblies of all the other States should be urged upon them by medical bodies.

The Balance of Nature.

Says a writer in the *Popular Science Monthly*: It was some forty years ago that the organic chemists, represented by such masters as Dumas and Liebig, worked out the beautiful idea of the balance of organic nature. They showed that the vegetable and animal kingdoms carry on antagonist processes—each forever undoing the work of the other. The atmosphere is the arena of this subtle conflict, being poisoned by the animal world and purified by the vegetable world; while these opposing processes so effectually counteract each other that the air is automatically maintained in a condition fitted for the preservation of the living races.

New Facts Concerning Rabies.

The *Veterinary Journal* for October reports that a contribution to our knowledge of this disorder has been recently made by M. Galtier, after a series of experiments. These were made principally on rabbits, and the most important of the conclusions which he draws therefrom is, that the saliva of a mad dog, obtained from the living animal and kept in water, continues virulent five, fourteen, and even twenty-four hours afterwards. This fact has consequences which everybody should be aware of. Thus it seems that the water of a vessel in which a mad dog may have dropped some of its saliva in attempting to drink, should be considered virulent at least during twenty-four hours; and next, that as the saliva of a mad dog which has succumbed to the malady or has been killed does not lose its properties through mere cooling of the body, it is important, in examining the cavities of the mouth and throat after death, to guard against the possible danger of inoculation. M. Galtier tested rabbits with regard to rabies, and found it transmissible to them from the dog; also, the rabbits' rabies

from them to animals of the same species. The chief symptoms are paralysis and convulsions. The animals may live from a few hours to four days after the disease has declared itself. It is notable that the period of incubation is much shorter in the rabbit than in other animals, and this makes the rabbit a useful reagent for determining the virulence of a particular liquid.

Report of the Pension Bureau.

The annual report of the Pension Bureau for the last fiscal year shows that on the 30th of June, 1881, there were 268,830 pensioners; 28,740 pensioners were added to the roll during the year, and the names of 10,712 were dropped, leaving a net increase of 18,028.

Ethical Questions in the President's Case.

We prefer to avoid personal discussions in this journal, and it is only because the case is so public a one, and because the daily journals have taken it up, that as a matter of news we print the following from a daily newspaper in this city:—

"WASHINGTON, Nov. 4.—Dr. Bliss, after having had his own way in several medical articles relating to the treatment and the case of the late President Garfield, finds himself now in hot water. He has been expecting an attack from Dr. Boynton, the President's cousin, and was ready to sweep him out of existence by crying the single word "homœopathist." But this attack did not come, but one from another and unexpected quarter, viz., from the physicians who were members of the first consulting board. The *Medical Retrospect*, the official organ of the District Medical Association, in the number just issued, has a long article on the President's case which will attract the attention of the medical profession throughout the country. It contains letters from Surgeon-General Wales, of the Navy; Doctor Purvis, Surgeon of the Freedmen's Hospital; Doctor Townsend, Health Officer, and Doctor Lincoln, one of the best surgeons of Washington, contradicting in strong terms the statement made by Doctor Bliss in regard to the early treatment of the President. In short, these letters fix upon Doctor Bliss the brand of having deliberately been guilty of faslehood.

"The *Retrospect* article has created quite a sensation among the doctors, and it is the subject of very general talk. The part most discussed, however, is the statement in reference to the one made by Dr. Bliss, that he took charge of the President and retained charge at his request and that of Mrs. Garfield. In reference to this the *Retrospect* says:—

"'In contradiction of this statement, we may say that it is susceptible of proof that President Garfield stated, after Dr. Bliss had resumed control of the case and refused admission to Dr. Baxter, that Dr. Baxter had been for many years and was still considered by him his physician, and that he had never expressed to Dr. Bliss a desire for him (Bliss) to take charge of the case. We are also prepared to say that Mrs. Garfield had no consultation with Dr. Bliss on the subject, and was at no time aware that her husband had selected him as his medical attendant.'

"From this direct attack upon Dr. Bliss's veracity it is evident that he is going to be hauled up by the Medical Association of this District, sooner or later, for violating the code of medical ethics. It is going to be a pretty fight, but appearances indicate that Bliss is going to get the worst of it."

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, July 1st, 1881, to September 30th, 1881.

Bailhache, P. H., Surgeon. Detailed as member of Board to examine keepers and crews of Life Saving Stations. Sept. 8th, 1881. To inspect the Service at stations in Maine, New Hampshire and Massachusetts. Sept. 9th, 1881.

Wyman, Walter, Surgeon. When relieved of special duty as medical officer revenue bark "Chase," to rejoin his station, via Washington, D. C. Aug. 18th, 1881.

Long, W. H., Surgeon. Detailed as chairman Board of Examiners. Sept. 12th, 1881. Granted leave of absence for twenty-four days. Sept. 24th, 1881.

Purviance, George, Surgeon. Detailed as member Board of Examiners. Sept. 12th, 1881.

Sawtelle, H. W., Surgeon. Detailed as recorder Board of Examiners. Sept. 12th, 1881.

Godfrey, John, Passed Assistant Surgeon. To proceed to Pascagoula, Miss., as inspector. July 27th, 1881.

Goldsborough, C B., Passed Assistant Surgeon. To proceed to Havre de Grace, Md., as inspector. July 27th, 1881. Granted leave of absence for thirty days. Sept. 1st, 1881.

Cooke, H. P., Assistant Surgeon. Granted leave of absence for thirty days. Aug. 12th, 1881.

Carter, H. R., Assistant Surgeon. Granted leave of absence for eight days. Sept. 24th, 1881.

OBITUARY NOTICES.

FREDERICK HORNER, M.D.

Died in Warrenton, Fauquier County, Virginia, Frederick Horner, M.D., October 18th, in the seventy-sixth year of his age.

He graduated in medicine from the University of Pennsylvania in 1829; was attending physician in the Almshouse of Philadelphia, and then established himself at Phillipsburg, Pa. Subsequently engaged in cotton planting in Mississippi, and finally removed to Warrenton, where he practiced his profession with success for forty years. He was a son of Dr. Gustavus B. Horner, of Revolutionary memory, and a consistent member of the Episcopal church.

MEDICAL DIRECTOR BACHE.

Medical Director Benjamin Franklin Bache, a great-grandson of Benjamin Franklin, and for nearly sixty years an officer in the United States Navy, died in Brooklyn on Wednesday. Dr. Bache was born in Monticello, Va., in 1801. He was a grandson of Richard Bache, a Philadelphia merchant of high standing, and Sarah Franklin Bache, the only daughter of Benjamin Franklin. His grandfather came from England to this country early in life, and was the first Postmaster

General of the United States, from 1776 to 1782. Dr. Bache graduated from Princeton College when only 18 years old, and from the Medical Department of the University of Pennsylvania four years later. He entered the United States Navy as Assistant Surgeon in 1824, and in 1828 he was promoted to the rank of Surgeon. He was in charge of the Naval Asylum in Philadelphia from 1845 to 1847. He was retired February 1st, 1868, and in 1871 was appointed Medical Director, with the relative rank of Commodore. Dr. Bache bore a strong resemblance to his distinguished ancestor, and his side face was almost the counterpart of that shown in the best pictures of Benjamin Franklin.

DR. JOHN MENNINGER.

Dr. John Menninger died last week at his residence in New York City. He was in his 57th year, and was in the active practice of his profession. Up to the time of his death Dr. Menninger's career was an eventful one. He came to this country in 1850, a political refugee from Germany. He came directly to New York, following Gen. Franz Sigel and Carl Schurz. Here he began the practice of medicine, and soon secured a high place in popular estimation. In 1851 his family followed him to America, and here ever since they have all resided. The German Government confiscated Dr. Menninger's estates immediately after his flight, but subsequently they were given back. In this country, Dr. Menninger had little to do with politics. Throughout all his life he was a close student, being particularly interested in chemistry. He made many important discoveries. Tinned paper was his invention, and brought him much money. He was a member of the German Social Scientific Society. Death was caused by a polypus growth in the throat.

—Dr. William B. Hahn, of Pottstown, died on Thursday, aged 82 years. He was a candi date for the Legislature on the Democratic ticket in 1840.

QUERIES AND REPLIES.

Variola.

Mr. Editor:—Will you have the kindness to answer the following queries through the REPORTER:—

1st. Has variola discreta ever been seen in conjunction with varicella?

2d. Are umbilicated pustules ever seen in varicella?

3d. Is it possible for variola discreta to pass through its various stages as mildly as an ordinary case of varicella?

Ans.—1st. It has.

2d. No.

3d. Yes.

Such are our opinions on these questions, the importance of which will occur to every reader. We shall be glad to publish any other views based on observation?

Formulas.

Mr. Editor:—Do you know of any book of formulas that contains a full list of formulas for the different elixirs. E. J. T., M.D.

Ans.—No published book contains a full list.

Dr. S. H., of Pa.—We do not know of any regular chartered medical college with the official name "Hygeo-Therapeutique Medical College," either in New York or elsewhere.

Dr. J. A. H., of Mo.—We recommend to you Napheys' *Transmission of Life*, price $2.00. It is for lay readers. In his *Surgical Therapeutics* a full chapter on spermatorrhœa will be found.

Pleural Fistula.

Mr. Editor:—Please be kind enough to inform me what would be the proper treatment of an artificial pleural fistula with profuse discharge, in a patient very much debilitated? Fistula of several months standing and lung compressed. Dr. M. A.

We shall be glad to publish suggestions on the above.

Calomel and Bromide Potassium.

Mr. Editor:—Tell me through the REPORTER if calomel and bromide potassium are medicinally incompatible? Or what would be the effect of this combination in prescription. I make Dover's Powder (improved), with *Bromide*, instead of *Sulphate* of Potassium, and it is sometimes desirable to combine Dover and calomel. Respectfully, N. T. DALAREY.

Ans.—Laboratory experiments are poor guides for physiological incompatibility. Competent authorities say there is no physiological incompatibility between calomel and potassic bromide.

MARRIAGES.

BARTHOLOMEW—CUMMINS.—On October 12th, by Rev. M. Newkirk, D.D., Dr. H. L. Bartholomew, of Warren, Pa., and Sadie G. Cummins, of this city.

BLAKER—ROGERS.—On Thursday, October 6th, 1881, by Rev. D. K. Turner, Dr. George G. Blaker, of Flemington, N. J., and Miss Emma L. Rogers, of Buckingham, Pa.

BRAYTON—POLLOCK.—At the residence of the bride's mother, Wyoming, Ohio, by the Rev. Geo. M. Maxwell, Dr. Forrest W. Brayton, of Carey, O., and Mattie T. Pollock.

CAMERON—McDANIEL.—At the residence of the bride's father, Lily Pond, Gordon County Ga., October 3d, 1881, by the Rev. A. S. Patum, Dr. W. Hart Cameron, of Atlanta Ga., late of Cincinnati, and Miss Mellie E. McDaniel.

CYPIHOT—CANDIEUX.—In Montreal, September 17th, 1881, at St. James Church, by Rev. M. St. Louis, pastor of Adamsville, Theodule Cypihot, M.D., of Claremont, N. H., son of Theodule Cypihot, merchant of Montreal, and Flora Candieux, daughter of Louis Candieux, also merchant of Montreal.

DEATHS.

BROWN.—Kate, wife of Dr. J. W. Brown, October 16th, 1881, in Tower City, Schuylkill Co., Pa., aged forty-seven years, five months and eighteen days.

COATES.—In Philadelphia, on October 16th, 1881, Benjamin Hornor Coates, M.D., in his eighty-fourth year.

COOKEY.—Suddenly, on Tuesday morning, October 18th, at Frederick City, Md., Dr. Joseph C. Cookey, of Baltimore.

MENNINGER.—In New York, suddenly, on Thursday morning, October 27th, John Menninger, M.D., aged seventy-five years.

MONELL.—At Detroit, Mich., on Thursday, September 29th, 1881, Gilbert C. Monell, M.D., formerly of Newburg, N. Y. Interred at Omaha, Neb., October 3d, 1881.

NEWTON.—In New York, on Sunday, October 9th, 1881, Robert Sanford Newton, M.D., in his sixty-third year.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

ALCOHOL IN INFANTILE THERAPEUTICS.

Delivered at the Hôpital des Enfants Malades,

BY M. JULES SIMON,

Physician to the Hospital.

Translated for the Med. and Surg. Reporter.

Gentlemen:—There exists, to-day, among many physicians, a certain degree of incertitude regarding the indications and contra-indications for the employment of alcohol in infantile therapeutics.

It is on this account that I propose to bring before you what is known concerning this form of medication, which you have frequently seen me employ.

I will first speak concerning alcohol itself, and then successively of its physiological effects and the indications for its employment in therapeutics. I do not intend to give you a complete history of alcohol; I wish immediately to take up the practical side of the subject.

Consult works specially devoted to the subject, and particularly the thesis of M. Jeffrey; you will be able to follow all the different phases of alcoholic medication; you will remark notably how, in opposition to the dogmatic school of Broussais, another, more in conformity with the great medical traditions, arose, under the direction of Louis, Laënnec, and Chomel.

This was before all a school of observation, which paid proper attention to the strength or weakness of the patient, and thence drew just inferences regarding the indications for treatment in diseases where theorists of the physiological school could see but the state of irritation under which the system labored, and these observers recognized also that in adynamic diseases alcoholic stimulants could be given without fear of increasing combustion.

It was not then, properly speaking, a new system of medication, when Todd, in 1860, introduced alcohol as a general method of treatment for inflammations and febrile diseases of all kinds; however, the extension of this medication to every disease characterized by high fever was received with much distrust by most practitioners, and for myself I must say that I was rather more surprised than convinced. My doubts, however, were of short duration.

The following case seemed to me most decisive in favor of the utility of alcoholic medication.

In 1865 I had under my care an American, forty-five years of age, with intense bronchopneumonia, accompanied with very violent nervous and inflammatory reaction. I essayed all the anti-stimulants and all forms of revulsive medication; notwithstanding my zeal, the situation soon became grave; extreme oppression induced by generalized congestion of the lungs supervened; there was abundant catarrhal secretion and rapid and alarming loss of strength. The mucous secretions in the bronchial tubes, which the patient was too weak to expectorate, accumulated in the upper tubes, and gave rise to loud, tracheal râles, which could be heard at some distance.

I considered that alcoholic preparations were indicated, but did not dare at that period to employ them without the advice of M. Jaccoud, who was, as I was well aware, thoroughly cognizant of the English works on the subject.

He considered, after due examination, that the indications for the use of alcohol were formal and of the greatest urgency. It was then nine or ten o'clock in the morning, and brandy was immediately administered. As I was very anxious regarding the effects of this medication, so powerful and so much opposed to my primary treatment, I managed to visit the patient again about eleven o'clock, and found him decidedly better, half sitting up in bed, the face by no means so cyanosed, almost natural in color; he seemed, as it were, coming back to life. From this moment improvement was decided, and convalescence soon established.

Since then I have observed many children with capillary bronchitis, pneumonia and broncho-pneumonia, lose strength constantly, and become weaker when submitted to any form of lowering treatment. While on the other hand, when alcoholic substances were administered in large doses, the amelioration was so rapid in the great majority of cases, that the utility of this form of medication seemed to me peremptorily demonstrated.

I have already, in another lecture, considered the action of alcohol at a physiological point of view, and I will to-day pass to the consideration of this powerful medicament as regards its employment in therapeutics.

The physiological data which we possess will be frequently utilized; but they are not as yet so completely established as to control entirely the use of this agent.

As things are at present, clinical observation has by far the greatest importance in the treatment of diseases; we can regard physiology but as a guide and often an unfaithful one.

From all that I have already said to you, regarding the effects of alcohol on the human economy, we can deduce the following conclusion: 1. Alcohol acts as a stimulant of the circulation and of the respiratory and cerebral functions; 2. As an aliment; 3. As an antipyretic; but as regards this last, I have a few remarks to make. We have seen that, even in small doses, alcohol lowers appreciably the general temperature of the body. Notwithstanding this, if alcohol be administered to a patient in a state of collapse and algidity after long exposure to intense cold, it will be found that under the influence of this treatment, the temperature rises gradually to the normal standard. Are the physiological data then wrong in this instance? No, the fact is but apparently paradoxical, as I am about to show you. What induces algidity under these circumstances? it is a sort of prostration of the vital functions; circulation, respiration, and nutrition are but languidly performed; there is prostration of that function of the nervous system which regulates animal heat; the organism is abandoned, without any defence against external causes of refrigeration.

Alcohol being administered in the doses which we have indicated as rendering it an energetic stimulant of the circulation, respiration and innervation, blood soon arrives in increased quantities in the various tissues, hematosis is more perfect, the sources of calorification renew their activity and normal conditions again hold sway.

You see, then, that in this instance, the clinical facts, far from being in opposition to the physiological data, are in entire conformity with the results of experimental research. Alcohol may be applied locally; but regarding its employment in topical medication I will say but a few words, as there is nothing special regarding such use of the substance in infancy. Alcohol is used in frictions over joints after sprains; on limbs in an anæsthetic state or when benumbed; also over the entire body as a sort of massage, as a stimulant during convalescence from wasting diseases and in chlorosis.

Alcohol is also used as a dressing for wounds and ulcers; it is injected into cysts and cold abscesses.

Its antiseptic properties render it of great service in gangrenous affections, in ulcero-membranous stomatitis, and in diphtheria. For topical application you may use diluted alcohol, wine or aromatic wine (Fr. Codex).

But what we shall especially consider is the internal employment of alcohol, and in order to arrive at a good understanding regarding this form of medication, we will pass successively in review the various affections common among children.

But first I wish to speak of certain little known applications of alcoholic medication in the newly-born infant. A child is born in a state of excessive debility; it has not the strength to live; either it has not arrived at full term, or labor has been long and difficult, so that the child comes into the world apparently dead; by artificial respiration signs of life are evoked, but the infant remains so feeble that it is incapable of suckling, and the absence of all nutrition will soon overcome the already precarious vitality. Do not, in such a case, hesitate; have recourse to alcoholic preparations; give to the feeble little mortal every quarter of an hour a teaspoonful of the following mixture, of course with proper precautions to avoid the entrance of the liquid into the

larynx: wine of Malaga, one-half ounce in half a glassful of lukewarm water; at the same time the child may be placed in a bath of wine. Under the influence of this treatment the child soon revives and becomes capable of suckling.

But there is one fault to be avoided in practice, when alcohol is recommended in such cases. This medication though very active and powerful, under the circumstances I have mentioned, must not be carried too far; and the parents should not be allowed to consider it as a means of bringing up children. It cannot replace suckling.

A few years since, I had in my practice a young woman, who was unable to suckle her child, on account of the malformation of the nipple, which was hard and very erectile, so that the infant, though vigorous, was unable to nurse sufficiently and became weak, diminished in weight, and was constantly somnolent.

I considered that a wet-nurse was imperatively required, but the family refused. Another physician was called and was of the same opinion, but at the same time ordered an alcoholic potion.

This seemed to revive the child so much, that a wet-nurse was not procured, the family thinking they could bring up the child with the aid of the potion. The child, however, soon again fell into a state approaching marasmus, and the intervention of a wet-nurse alone saved it from death.

Again, you will meet with cases, in children naturally feeble, who after a restless night become pale, without strength and unable to nurse. In such a case alcohol should be administered in the same manner we recommended for the newly-born infant.

It is in diseases of the organs of respiration that alcohol finds its most important indications, and it is of these maladies I will first speak.

Different groups may be established among them. Those in which alcohol should be employed preferably to every other form of medication are: capillary bronchitis, broncho-pneumonia, and pneumonia. I cannot recommend alcohol too highly in these diseases; leave aside all medicaments which act as depressants, such as aconite, kermes mineral, polygala, etc.; they act in opposition to the end desired; notwithstanding the idea we may form of the phlegmasia, give alcohol; it acts marvelously well, and is, with repeated blistering, the best treatment to institute.

The preparations most convenient to use are brandy, one-quarter or one-half ounce; or wine of Malaga, one ounce or more, in potion, per diem.

The medicament should be administered in small doses, frequently repeated, and much diluted, to avoid irritating the stomach.

Under the influence of this treatment the temperature falls, respiration becomes less frequent, the pulse slower, there is less tendency to delirium, and the skin is soon covered with abundant perspiration.

As regards other affections of the respiratory organs, such as laryngitis, bronchitis of the larger tubes, or in generalized bronchitis, alcohol is not proper in their treatment; is rather contra-indicated.

Emetics, nervines, like aconite and belladonna, revulsive applications; such are the means you should employ in these last cases.

Croup, however, requires special mention as regards treatment by alcohol, and I will return to it when speaking of diphtheria.

In chronic diseases of the respiratory organs, chronic bronchitis, bronchial adenopathy and chronic phthisis, alcohol may render service, but special precautions are necessary, as the treatment must be of long duration.

Administered under the form of wine with bark, or in any other preparation undiluted with water, it is apt to induce that form of dyspepsia, where anorexia is complicated with pyrosis, of which I have already made mention. Alcohol may act in such cases like sulphur, in stimulating for a short period the pulmonary mucous membrane and the lung. You should order it to be used from time to time and not constantly, and should never forget that it is but an accessory part of the treatment.

The real foundation of the treatment should be the mineral waters containing sulphur (Eaux Bonnes, Enghien, Mont-Doré), arsenic, phosphate of lime, revulsive applications over the chest, etc.

In emphysema and asthma, alcohol may also be useful. Here again it is a useful adjuvant to the treatment by iodide of potash, the sulphurous waters we have already mentioned, and the arsenical preparations.

Under certain circumstances, diseases of the digestive organs are favorably modified by alcoholic medication.

Among acute throat affections alcohol is used only in diphtheria, and in this disease it is of great benefit both internally and as a topical application. You are aware that in diphtheria I am absolutely opposed to cauterization; I seek only to modify the diseased surfaces with lemon juice, carbolized lotions, aromatic wine, or with alcoholized water (two tablespoonfuls in a glass

of water); this mixture may be used as a gargle or in spray.

In connection with this topical treatment, a general treatment may be put in operation, from which all depressants are carefully excluded, no mercury, no alkaline preparations, no opium, no bromide of potash, but instead of all these alcohol.

Every kind of wine may be used, with brandy diluted with water, at the same time with coffee, tea, etc.

The supreme indication is, in effect, to raise and sustain the vital forces.

I do not need to tell you that the application of blisters and the use of leeches are absolutely contra-indicated.

In certain forms of dyspepsia, particularly in the atonic dyspepsia met with in city children, alcohol gives excellent results. In such cases, Malaga wine with bark may be given before meals, properly diluted.

Without this precaution there is risk rather of aggravating the affection by this treatment. In fact, the administration of alcoholic preparations necessitates extreme attention on the part of the physicians, with a perfect examination of the patient; for I believe that there are cases where they are indicated, which much resemble others where they are formally contra-indicated.

If your patient presents a vague yellow tinge of the skin and sclerotica, if the liver is somewhat more voluminous than in the normal state, and if there exists constipation, you should abstain from administering alcohol, for if you do, polycholic will soon supervene, the dyspepsia become more inquieting, and you will have in effect aggravated the situation. In such cases the digestive troubles are consecutive to hepatic congestion, which is but augmented by alcoholic preparations.

The alkaline mineral waters are indicated, and the water of the spring St. Jean, at Vals, will certainly ameliorate this form of dyspepsia, of which the liver is the veritable point of origin. Under this treatment the sub-icteric tinge of the skin will gradually disappear, and at the same time the augmentation in volume of the liver will become less marked.

In the greater number of cases of diarrhœa, it will be sufficient to give subnitrate of bismuth, associated with diascordium or with laudanum, and there is no necessity to order alcohol; but if there is great prostration, or the diarrhœa be at all choleriform, it will be imperatively required. You should commence to employ it as soon as you perceive any fall of temperature about the cheeks, and it should be employed not only internally, but also externally, in warm frictions over the body.

In fact, with laudanum, alcohol should constitute the entire treatment. When the tendency to chilliness has disappeared, alcohol need no longer be given, and you can return to the ordinary treatment of enteritis. This furnishes me with the occasion to recall before you my experience regarding the administration of opium, and more particularly of laudanum, to young children. You all know how severely such medication has been judged, and the number of accidents attributed to it. I believe that a great deal depends on the mode of administration. Giving opium or laudanum in divided doses in the proper proportions, considering the age and strength of the child, you will never have to fear any accident. In a julep of one hundred and twenty grams put a drop of laudanum for a child under six months, one drop from six months to a year; two drops at two years; a teaspoonful of this mixture can be given every hour, until the diarrhœa becomes somewhat diminished, then the doses may be given less frequently; where the drug is given in such fractional doses you will never have any accidents from its use.

A fact which appeared very strange to physicians a few years since, was the employment of alcohol in the treatment of febrile diseases; and yet we well know, to-day, that it is often indicated, and even that it is more strongly indicated when the temperature is highest.

Many physicians formerly gave wine and water, or a cordial mixture, in certain general diseases; in typhoid fever, adynamic pneumonia, and in all states where collapse was present; but this medication had not arrived at the dignity of a method, and recourse was had to it but in exceptional cases, and often in extremis.

The only inconvenience attending the administration of alcohol in febrile disorders is that it diminishes urinary secretion, that it hinders, in a measure, organic depuration; to obviate this difficulty and to provide a supplementary outlet for the products of this depuration I am in the habit of giving mucilaginous drinks, laxatives and frequently repeated enemata.

In febrile disorders, alcohol calms the ataxic symptoms, diminishes adynamia, raises the vital forces, lowers the temperature notably and retards denutrition by diminishing combustion and the exhalation of carbonic acid.

You can then see of what importance this treatment is in such affections, but it must not be for-

gotten that it attacks but one part of the disease, and the other means used in such maladies must by no means be neglected. In the period of convalescence from grave fevers alcohol is of great benefit in exciting the various functions. With the eruptive fevers erysipelas may be classed, in which alcohol produces the same results and is equally indicated.

Finally, in the obstinate acute forms of intermittent fever and in its chronic forms, there is great advantage in giving alcoholic preparations, particularly wine and wine with bark.

In a general way it may be said that alcohol is indicated in all cases where there exists adynamia or tendency to collapse; it is thus indicated in the treatment of gangrene of the mouth or vulva, in chronic poisoning, and in all cachectic states.

You have perhaps noticed that I did not speak of acute articular rheumatism when considering febrile diseases, although alcohol has been much praised by some authors in that affection.

I do not advise it, and personally, I take care of my patients in rheumatism and make no pretension of giving curative treatment. If I prescribe salicylate of soda, at the dose of one to two or four grams to children from six to ten years, and tincture of belladonna or digitalis at the dose of 10 or 15 drops, or sulphate of quinine, 20 to 50 centigrams per diem, it is less with the object of cutting short the malady than of diminishing as much as possible, the pain, and to shorten the duration of the malady. By very large doses you may be able to obtain an entire cessation of the articular fluxion, but as soon as the medicament is laid aside, you will be surprised by a return of the disease more violent often than at the first attack.

I consider these therapeutic agents particularly the salicylate of soda, as excellent medicaments against acute articular rheumatism in children, but until their effects are better known I will hold to the line of treatment I have just indicated to you.

First I try to arrive at the susceptibility of the child for the medicament by giving one gram of the salicylate the first day, then I gradually increase the dose until certain phenomena of saturation supervene; at this point the pain is effaced and I do not further increase the dose, but maintain the tolerated dose as long as possible. As the rheumatic influence persists a month at least, it will be necessary to prepare for a prolonged course of treatment.

Aran died in attempting to break up and arrest the progress of a rheumatic attack by means of repeated bleeding; the rheumatic pains were calmed and even disappeared, but were replaced by cerebral encephalopathy.

It is a striking example, among thousands that might be cited, of the dangers of all forms of abortive treatment.

You should not give alcohol in acute articular rheumatism, nor the preparations of opium in large doses, and for analogous reasons. I once lost one of my patients through yielding to his solicitations, and giving opium in increasing doses, as has been advised by Trousseau. It was a very excitable man, about thirty years of age, engaged very actively in business and a prey to many mental preoccupations.

Opium seemed indicated, on account of the pain, which was very acute, and for the mental excitement. After a few days the articular trouble suddenly disappeared and the patient succumbed to cerebral rheumatism.

Affections of the heart may, under certain circumstances follow the intervention of alcohol. Thus it should be given to children with malformations of the heart inducing cyanosis, in order to increase the strength of the cardiac muscle. It is also indicated in asystoly and in all cases where there is tendency to syncope, where there is slowness of the pulse or atony of the capillary circulation in the skin or the lungs. On the other hand, and the reason is evident, alcohol is contra-indicated in acute endocarditis or pericarditis.

A few words and I will have finished with the cases where alcohol is indicated. In generalized chronic diseases, such as anæmia, chlorosis, scrofula and rickets, alcoholic preparations may be utilized with benefit.

There are two sorts of anæmia, traumatic anæmia, due to abundant and prolonged hemorrhage (epistaxis, hemorrhage from the umbilical cord, surgical operations, etc.) and chronic anæmia, which becomes slowly established through bad hygienic conditions or organic alteration.

Apropos of traumatic hemorrhage in infants allow me to recall a case which, though rare, was very instructive.

A newly-born infant presented a small incisor tooth which was mobile and troubled, or appeared to the physician to trouble, the infant when nursing. He removed the tooth, placed a small tampon in the cavity, and left the little patient. Two hours after he was sent for in great haste, as the hemorrhage from the cavity had recommenced and could not be arrested, either by compression or perchloride of iron. He essayed every means, red hot iron, firm compression, etc., without any effect, and the child succumbed through the loss

of blood, which could not be arrested. These cases are exceptional, but it is well to know of them, and so avoid any attempt at avulsion of a congenital tooth.

But there is another form of anæmia which comes on slowly, is carried very far, and is connected with privations of every kind, sojourn in large cities and in crowded foundling, and other asylums. In such cases the alterations of the blood are of great gravity, and the treatment presents many difficulties. Alcohol is indicated, but should constitute only a part of the treatment, which should be instituted in the following manner:—

Every morning, before breakfast, a bitter aperient syrup (syrup of gentian), should be given; before each of the other meals alcohol, properly diluted, for the reasons I have so often developed before you.

During the winter, cod-liver oil mixed in the same glass with wine of bark or with porter. Commence with a few drops of oil and augment progressively the doses. Here, again, proper attention should be paid to the susceptibilities of the stomach and liver, though, as a general thing, children support very well cod-liver-oil and improve on it. Once or twice a week omit the oil and give a laxative, in order to keep the appetite good.

In rickets and scrofula this treatment will be entirely applicable, but phosphate of lime in powder should be added, or it may be given in solution or syrup; sulphurous baths, sea-bathing or bathing in water containing salt, with alcoholic frictions, will prove of great benefit.

In a third and very exceptional class of cases, there is a congenital disposition to hemorrhage, of which the nature is hidden, but where obstinate bleeding occurs on the slightest causes. This hemorrhophilic condition should be combated in the infant as in the adult, by internal administration of perchloride of iron and also by preparations containing alcohol.

As you see, against all these diseases affecting the general system, alcohol occupies but a limited place in the treatment. This is also true in chlorosis; gentian wine and wine of bark are employed with advantage; but it is used at the same time that a general treatment by iron, hydro-therapy massage, out door exercise and gymnastics is instituted; these patients will also profit in summer by a sojourn at Luxeuil or at a sea bathing resort.

One of the greatest difficulties in treating chlorosis is to find a good ferruginous preparation which agrees with the patient under treatment. With children you may first try the mineral waters of Orezza and Bussang, and when they are somewhat older a powder containing equal parts of subcarbonate of iron and rhubarb may be prescribed. If these preparations are not successful, you will essay the effects of lactate of iron in pills of ferrum redactum, of tartrate of iron, etc. But it must always be remembered that there is a species of false chlorosis, symptomatic of tuberculosis, which is often very difficult of diagnosis in the first stages of the disease; and in this initial period of tuberculosis the employment of iron and hydro-therapy, so useful in true chlorosis, may induce grave hæmoptysis and accelerate the progress of the malady. I have often observed cases where such results occurred.

Finally, as might be supposed, alcohol is formally indicated in scurvy, in purpura and in spontaneous hemorrhage, all affections indicating a very low state of vitality.

So far, we have only considered cases where alcohol was indicated, but I have mentioned several of its contra-indications in referring to different diseases. But in conclusion, I wish especially to refer to cases where this therapeutic agent is contra indicated. Alcohol is contra-indicated in all nervous diseases, in nervous irritation, cerebral sclerosis, meningitis, epilepsy, eclampsia, chorea, and incipient hysteria.

It should equally be proscribed in all acute skin diseases, without exception, and in a certain number of chronic affections, such as eczema, psoriasis, pityriasis, prurigo, urticaria, ecthyma, and furunculosis.

I have already told you what I think of the employment of alcohol in acute rheumatism; I do not consider that it is of advantage in chronic rheumatism, on account of its action in diminishing urinary secretion. And I even avoid administering alcohol to children who have presented any signs of rheumatism, if the parents have any rheumatic or gouty tendency.

The indications for the administration of alcohol, are, however, so numerous, and so well defined as to place this precious medicament in the high rank I have assigned to it in infantile therapeutics.

Pilocarpin and Muscarin.

Dr. S. Ringer has made the curious observation that the antagonism of pilocarpin and extract of muscaria on the frog's heart varies in different months. In the summer months pilocarpin always strongly antagonizes extract of muscaria, but in the winter months there is often no antagonism, and even when it occurs, it is generally slight. This difference is due to temperature.

COMMUNICATIONS.

HOW BONES BREAK—THE STUDY OF FRACTURES FROM A NEW STANDPOINT.

BY EZRA MICHENER, M.D.,
Of Toughkenamón, Pa.

The following cursory observations have special reference to lesions of the shaft of the *Os Femoris*, as a typical fracture. But they will mostly apply as well to fractures of the long bones generally.

Comminuted fractures, and those occurring near the *extremities* of the bones, are exceptional, and may require exceptional treatment.

Simple fractures have long been divided into *transverse* and *oblique*, not so much from the direction or shape of the fractures, as from the different treatment which the two are supposed to require.

From this point of view, all fractures may be called *transverse*, where the surgeon is able to abut or interlock the fragments, so that they will maintain the *length* of the limb without the aid of mechanical extension.

On the contrary, when he fails to accomplish this, the fracture is adjudged to be *oblique*, and recourse is had to mechanical means to do what the bone and the doctor could not effect.

The *traditional belief* in the *frequency*, and the mischievous tendency of oblique fractures, does not appear to have lost *prestige* in its descent through the ages.

The terms transverse and oblique, as here defined, are obvious *misnomers*, and without the definitions, they would be meaningless. I shall endeavor to show that a better arrangement would be, into *dentate* and *sub-dentate* fractures.

The proper measure of the *obliquity* of a fracture is its *length*, taken in the direction of the axis of the bone; but its technical *obliquity* depends upon other conditions—the even and smooth *slope* of the fractured facets; probably a rare occurrence.

Neither the *antiquity*, nor the popular *acceptance* of an opinion, can be received as *de facto* proof of its correctness. They are factors, as potent to perpetuate error as truth.

I have long been led, by *à priori* reasoning, to *doubt* the frequency of oblique fractures, as here considered; and my own personal experience and observation have constantly confirmed those doubts. They have not been observed.

Like most others, I have accepted the popular teaching. Like them, too, I had not the opportunity of seeing and knowing *how*, and in what manner, the bones had been broken, which came under my care.

Some years since a case occurred, where the leg of a seven year old child was caught and dragged under a long log, on the public road. The upper anterior and inner tibial region, were entirely torn away, the bones both broken, and the leg doubled back upon the thigh, with all the fragments protruding. I at once noticed that the fractures were not either transverse or oblique, but they were nicely *dentated* or toothed.

After having cut away more than an inch of the upper tibia, which was denuded of periosteum, and left without any possible covering, I was able to interlock the *dentated fragments* of the fibula, and with the aid of a tight external splint, rendered it an available *stretcher*, to maintain the extension of the limb during the tedious months required to supply the deficiency in the tibia and its coverings.

The study of the fractures, exposed to view in this case, shed a ray of *light* on the dark obscure. I asked myself, *Is this the manner in which bones break?* If so, who can estimate the value of a correct knowledge of the facts to the surgeon? It now seems strange that I did not then pursue the investigation; but I did not.

Now, after a period of sixty-five years, devoted to the study and treatment of fractures as they occur in a country practice, I am constrained to say, that the *frequency* of oblique fractures has been greatly overrated or their character misunderstood.

On a careful retrospect of this period, I find, that of the many cases which have come under my notice, from the searching of six months to the more mature age of eighty-seven years, I have not had a single instance of *oblique fracture.*

If the *correctness* of my diagnosis is called in question, I have only to say that I have *never* resorted to mechanical extension, and I have *never* turned out a *shortened* limb or a *limping patient.*

My experience would, indeed, seem to refer the *obliquity*, so often complained of, to the *brain* of the surgeon rather than to the broken *limb;* to a mere *ignis fatuus*, which only leads to bewilder, and dazzles to blind him. But this does not bring us nearer the truth.

It is still an open question. Let us, therefore, rather inquire *how bones break*, and earnestly endeavor to demonstrate the fact by an extensive and carefully prepared series of the *bones themselves*, broken artificially.

The fracturing force is usually some modification of a *lateral* stroke, suddenly or more slowly applied, in form of a heavy pressure or crushing weight. And it may be presumed that similar forces, when similarly applied to the cylindrical bones of men, or other animals, after death, will break them much in the same *manner* as human bones are broken during life.

In this way we can obtain a proximate knowledge of *how*, and in what manner, bones *incline* to break, and learn the relative frequency of the forms which they present—a knowledge which would greatly assist the diagnosis and treatment of fractures.

In furtherance of this *new study* of fractures, I have begun to prepare an experimental series of bones, artificially broken. From the specimens thus obtained, there appears to be an obvious and unmistakable *tendency* to break in a *dentate* or toothed form.

In most cases the *dentures* are strong, and when properly interlocked or abutted and held together by the tonic force of the muscles, would be able strongly to resist any *lateral* displacement.

In a few cases the denticles are smaller and less apparent, but I have not found them absent in any case. Hence, as has been intimated, I would classify these fractures as *dentate* and *subdentate*, without attempting any nice line of distinction, the difference being only in degree and not in kind.

The nature of the force, and the manner of its application, will, no doubt, influence, in some degree, the form of the resulting fracture; but, however varied the force, the tendency to break in a *specific form* is still *manifest*. The hollow and cylindrical form of the bone, and its fibrous structure, may increase this tendency.

When we consider the adverse teaching; the diversity of opinions; the thousand means recommended; the limited opportunities of most surgeons; and the uncertainty of their diagnosis; is it uncharitable to suppose that mistakes do and must occur? And what is so likely as for the surgeon to fail in properly setting the bone? and to accept the teaching of the schools, that the fracture is oblique, and can only be treated with the aid of mechanical extension? Is there not a danger that he may thus unjustly excuse himself for the shortened limb, and a limping patient?

I have stated some facts in this paper, and elsewhere, in relation to fractures, which are irreconcilable with the traditional belief, the teachings and the practice of most surgeons, in their treatment. I have endeavored to sustain those facts by approximate evidence derived from an extensive series of artificial fractures, to show how bones break. I am only a feeble unit, not a "Hercules," to cleanse an Augean stable. What can I do? A prominent professor and teacher of surgery writes me, "I have always taught that fractures of the long bones are, as a great law, liable to few exceptions, oblique in their direction. Of adults this is especially true; in children, transverse fractures are more common." He moreover rejects all experimental evidence, "unless performed upon the bones of the dead subject, with all the muscles, ligaments, and other structures in their natural situation." To obtain proof in this superlative degree, it would seem that the subject ought to be living and in a healthy condition. I can only cast my bread upon the waters, to be found after many days.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF DISEASES OF THE MIND AND NERVOUS SYSTEM.

BY PROF. WM. A. HAMMOND, M.D.

Reported by H. H. Seelye.

Epilepsy.

Case 4.—A young man about twenty years of age, but delicate looking, came to the clinic accompanied by his mother. The history of the case, as elicited from them is as follows: Last July he was bitten on the back of the hand by a mad dog. His friends then told him that he would probably have hydrophobia, and they so frightened him that he became apprehensive of being attacked by the disease. On the first and second day after being bitten, and ten or eleven times since, he has manifested peculiar symptoms. His head suddenly feels dizzy, and then his eyes roll about or are turned toward one side; he then falls down unconscious, froths at the mouth, and bites at anything near by. He does not cry out or bark like a dog, or bite his tongue. Sometimes he does not fall, but without knowing it, he leaves his work and runs about, and may go down stairs. He is a printer, and his fellow workmen tell him that this is his habit. He can tell beforehand when an attack is coming on. Once, while in this condition the doctor came and held something under his nose; and he immediately jumped up and was all right again. After a fit, he usually has a headache and feels very sleepy. If allowed to, he will sleep half a day quietly, and with no muscular twitching. His mental faculties do not seem to have been in any way weakened. His latest attacks were on the 25th and 28th of January and on the

1st of February. He says that he is not now afraid that he will have hydrophobia.

After obtaining this history, Prof. Hammond occupied the remainder of the hour with the following interesting remarks:—

This, he said, is probably a case of epilepsy, developed by fright. There is a disease known as false hydrophobia, to which this case is somewhat analogous. I have seen several of these cases. One was that of a policeman, who had been bitten by a vicious dog. His friends so frightened him, by telling him that he would have hydrophobia, that he went to bed and sent for the police surgeon, who then summoned me to see the patient. On entering his room, I found him lying on the bed with his eyes wide open, breathing heavily, his face very red, and frothing at the mouth. If a glass of water was offered him, he would refuse it, and would howl and bark like a dog, and bite at things which were near. But if a glass of brandy was substituted for the water, he would swallow it eagerly. He seemed to think it necessary to evince a horror of water only. But to be consistent, he should have feared other liquids as well. As soon as I found that he could swallow brandy, I knew that he did not have true hydrophobia, so I sent the police surgeon in to him and told him to say, that if he did not immediately get up and report for duty, he would be discharged, for there was nothing the matter with him. This had the desired effect, for he thereupon got up and went out to his work, and has not been troubled since.

In this false hydrophobia, the patients think they must simulate the manners of a dog. So they always overact the matter. The phenomena are wholly hysterical in character; they do not intend to deceive. The diagnosis is easily made, for in true hydrophobia there is none of the biting and barking, and going about on all fours, which is characteristic in the false variety. Nor is there any horror of water in itself, but there is great apprehension of the disturbances which would be caused by swallowing the water or any other liquid. The idea of taking the water, causes the reflex convulsions. Moreover in the intervals between the attacks, the countenance has a grave apprehensive appearance, while this is not the case in the false type, for here they forget themselves often, and laugh and talk and enjoy themselves.

The case of this young man has assumed somewhat the type of false hydrophobia. But it is probably true epilepsy, though it is not a typical case, for a patient with true epilepsy does not generally bite at anything.

There are several different kinds of epilepsy. But in all, unconsciousness is the essential feature of the paroxysm, and the disease is not epilepsy if consciousness is maintained throughout the attack. This opinion, however, is different from that of many authorities. In one class of cases, the patient may become unconscious only for a moment, and have no spasm. He is perhaps walking with a companion, and he suddenly stops his conversation for a second or two, which may not be noticed by his friend, and he then recovers and goes on with his talk from where he left off. This used to be called the petit mal, and is apparently the mildest form. In another variety there may be unconsciousness, with only a slight but nevertheless obvious spasm. A man may be eating his dinner, when it is noticed that he has dropped his knife and fork, his mouth and face twitch, and his hand becomes cramped and he pushes his chair back a little. He recovers himself in a few seconds and continues his meal. Meanwhile he has been quite oblivious of all that was going on; and were it not for this unconsciousness, the attack would not be epileptic. In a third variety, the patient loses consciousness, falls down, becomes convulsed, and has an attack of the grand mal. This is the most common form of epilepsy. The person afflicted may be sitting quietly, when suddenly he utters a loud and peculiar cry, which resembles closely the bleating of a goat, but is terrifying and liable to produce attacks in other epileptics. Thus, where many epileptics are inhumanly and unscientifically detained in one hospital ward, when one patient utters this cry it will often set off a dozen or more others. This is the very initial phenomenon which is apparent, unless, perhaps, a pronounced pallor of the face precedes it. They are, however, practically simultaneous, and it is difficult to say which is first. This pallor, which is probably caused by cerebral anæmia, soon becomes deadlier, and the patient loses consciousness and falls, generally forward, on his face.

Then the paroxysm begins. First is the tonic stage, in which the muscles are all rigidly contracted. The action of the sterno-cleido mastoid compresses the veins of the neck, and hence the face becomes very livid, and the respiratory muscles of the thorax becoming stiffened, the breathing consequently ceases. This condition may last from a few seconds to half a minute, or more. If it continues for longer than a minute, death from asphyxia is liable to follow; and this is the only stage of the fit in which death may occur. This is immediately succeeded by the clonic stage, where there is relaxation of all the muscles. A long breath is now taken, and then the limbs become violently agitated and are thrown about wildly, and the tongue may be thrown forward, and it or the lips be bitten; and there is frothing at the mouth, due to the collection of thick saliva in the buccal cavity, and this may be mixed with the blood from the wounded tongue or lips. The water and fæces may also now be passed involuntarily. This stage may last from half a minute to a minute. This is always followed by a comatose state, or condition of stupor with stertorous breathing, and vacant expression of countenance, and this may last from five or ten minutes to two or three hours. But in very old cases this condition of stupor is often wanting, and the patient gets up and walks off as if nothing had happened. These people often injure themselves in the first stage by falling against obstacles in the way. I once knew of a lady who, while she was carrying a basin containing about a quart of water, had a fit and fell forward with her head in the basin, and was drowned thus before she was discovered.

There is still another variety, called the abortive form. Here the patient exhibits many eccentricities, both muscular and mental. He may have hallucinations and commit some outlandish

act, or have acute mania, and so unconsciously commit some crime, while outwardly he may appear to be in full possession of his senses. Such cases appear to lead a double life. Not long ago I had an interesting case, which illustrates this. A gentleman of this city, with a history of syphilis in his youth, and whose epilepsy was therefore of specific origin, went one day into a florist's to buy flowers. He there became unconscious and remembered nothing more for eleven days. Meanwhile, he went to the depot, bought a ticket for some place in Pennsylvania, lost his ticket, was put off the cars, bought another and resumed his journey, and finally came to himself, after eleven days, in a hotel in the lower part of this city. Another case, is that of a merchant in this city, who who attacked in his office, and while unconscious, went over to Brooklyn and back again to the Fifth Avenue Hotel, and at last came to himself in front of St. Paul's Church. At present, I have a young lady under treatment, who seems to lead two separate existences. She may be in her normal condition, which we will call No. 1. Within two or three hours after, she is in condition No. 2, and is now unconscious of all that took place while she was No. 1. This in turn passes off, and she again becomes No. 1, and is then unconscious of everything she did while No. 2. A curious thing is, that she has certain favorite employments for each condition. And she has also certain friends whom she recognizes only in one condition, while in the other condition they are her enemies, and she has now a different class of friends.

This has been going on for six or eight months, and the periods of her normal condition, are gradually becoming shorter and shorter, so that in time, she will have completely changed her identity, and will remain in condition No. 2. There are several instances on record of similar cases.

There is another form of epilepsy, which is entitled to be considered as a separate type. It is characterized solely by hallucinations with unconsciousness. Hallucinations simply, without loss of consciousness, is not epilepsy. Last summer, I had a case of a young lady who was subject to these visions. She always had an aura preceding the attack, which was a peculiar, indescribable sensation about the head. One day, while sitting in my office, she had an attack. She said, "now doctor it is coming on, I feel it." Then she went on, "there is a beautiful white swan. Look at it; over there, by the fire. It is eating. I never saw one so large and white before." When asked if she thought it really was a swan, she said "no, I do not; but it seems as real as anything else in the room." Her eyes then closed, and her head fell forward on her breast, and she became unconscious. In a few minutes she recovered. She has a dozen such attacks a day. She also has the grand mal. Is treated with the bromides. I have had half a dozen similar cases.

I read a paper on this subject before the Neurological Association, and none of those present doubted that these cases were true epilepsy; but we differed as to the probable location of the seat of the disease.

My opinion was, that the lesion was in the optic thalamus, while they believed it to be in the cortex.

All the varieties of epilepsy are generally preceded by an aura, in some part of the body. This may take the form of some morbid fear or apprehension, or it may be some motor, or sensory impression. It generally starts from the pit of the stomach, probably originating in the solar plexus, and shoots upward to the head. As soon as it reaches the head, there is loss of consciousness. The aura often seems to start from the thumb, and then flows up toward the brain. When this is felt, the paroxysm may often be averted by tying a string quickly about the thumb, or other origin, thus apparently cutting off the flow of the aura to the head.

The next question is, how to treat this young man. He has not had much treatment so far. He has taken cod-liver oil, and some medicine which he says was red and bitter. He took a tablespoonful three times a day. It did not taste like salt, so was not a bromide. The treatment of all the forms of epilepsy is, however, about the same. It consists almost exclusively in the administration of some of the bromides. But there are certain other remedies now used which seem to have almost as good an effect as they in some cases. Any of the bromides may be given in doses of fifteen grains, three times a day to begin with. The sodium salt is more pleasant because it tastes exactly like common salt, and so if desired it may be taken with the food. The majority of cases will get well under the long continued administration of bromide of sodium. Experience has proved the following to be one of the best plans of treatment:— Dissolve eight ounces of bromide of sodium in a quart of water. Of this, take a teaspoonful, three times a day. After three months, add one teaspoonful more to the night dose, and after another three or four months add a teaspoonful to the afternoon dose also. At the expiration of a year, do the same with the morning dose, and continue with this for a year or more thereafter. If no symptoms of the disease have meanwhile appeared, then gradually reduce the doses, and at the expiration of the third year, stop. The attacks do not usually return after this course of treatment.

Ordinarily, however, patients stop the medicine after a month or two, and in such cases, the attacks almost invariably return. It is then almost impossible to bring these patients under the influence of the bromides again. The doses will have to be at least doubled, and this may so derange the system, as to make it impossible to take the medicine longer. I have probably seen more epilepsy than any man in this country, having in the last seventeen years treated over nine thousand cases, and my experience is, that it takes at least two years to overcome the disease. And if I had it, I would take bromides all my life.

This is all the treatment essential, but certain other methods may be tried. A seton, or the actual cautery, applied to the back of the neck is sometimes beneficial, especially in those cases where the patient bites his tongue. Some say they believe it is because the disease is here located in the medulla oblongata. Careful diet should also be observed, and pastry, nuts, candy, cake, and other things which disagree with the patient, should not be eaten.

Whenever there is an aura preceding the convulsion, that especial attack can invariably be prevented by the inhalation of nitrite of amyl. There is no danger whatever in its use. Four or five drops should be carried about in a small homœopathic vial, and the moment the patient feels the attack coming on, he should pour this out into the palm of his hand and breathe it in. If he gets but two whiffs of it, this will generally be sufficient. The effects are immediate. The heart beat is greatly accelerated, the blood vessels become dilated, and so make the face very red, and there is a sensation as if a thousand needles were pricking the face. These symptoms soon pass off. During the paroxysm the less done the better. Merely keep the head on a level with the body or slightly elevated, and loosen the cravat and collar and put something between the teeth, to prevent him from biting his tongue. For this purpose it is well for him to carry about him a champagne cork, attached to a string, and to thrust this between his teeth whenever he feels an attack coming on. It is a fact that, after total extirpation of the tongue, a man can speak perfectly, while the loss of half an inch is followed by great disturbance of speech.

Where the bromides have failed, nitrite of amyl, may be used internally. One drop on a lump of sugar should be given three times a day, and the dose gradually increased to three or four drops. Or a diluted preparation may be made, by adding one hundred drops of alcohol to one drop of nitro-glycerine, and of this, one drop should be given three times a day, and the dose gradually increased to ten drops. Either of these will often succeed where the bromides have accomplished nothing.

This young man seems to have the abortive form of epilepsy, for he does not fall in the attack. We will give him fifteen grains of bromide of sodium, three times a day, and have him come back in two weeks to report.

Notes on Case 4.—Epilepsy is historically one of the oldest diseases known. But among the ancients it was not distinguished from other diseases which were characterized by convulsive movements, or by any extraordinary or unaccountable phenomena. All persons affected with any of these diseases, as well as the insane, were called demoniacs, because the unusual manifestations, which were quite involuntary, were supposed to be due to an evil spirit taking up his abode within the individual; and this spirit was called a demon. And, so among the diseases classed as demoniacal, we find frequent descriptions of epilepsy in its various forms, in the writings of the ancients. Such are found in the works of Homer, Herodotus, Euripides, Hippocrates, and later writers among the Greeks, as well as in Josephus and the Hebrew scriptures among the Jews.

Inasmuch as the disease was supposed to be caused by the possession of evil spirits the only method of treating it at that time was by means of spells, incantations, exorcisms, and magic, the purpose of which was to induce a good spirit to come and drive away the demon. Hence epilepsy was always regarded in a religious manner, and so was called among the Greeks "the sacred disease." Hippocrates, however, wrote a special treatise concerning this malady, wherein he combated the popular idea of its cause, and maintained that it was no more of divine origin than were all other diseases.

But the Jews always held that it was of divine origin, and believed that it could only be removed by the aid of the deity. So when Christ came and manifested his power to cast out these so-called evil spirits, this was one of the strongest proofs of his divinity, to the people of that age. It is not probable, however, that all of those cases in which it is recorded that Christ cast out devils were epileptiform in character. But in Mark ix, 17–27, there is quite a detailed description of a case which was undoubtedly epilepsy. In Luke ix, 39, the same case is described briefly, thus: "And lo, a spirit taketh him, and he suddenly crieth out: and it teareth him, that he foameth again, and bruising him hardly departeth from him." Here we have the sudden onset of the attack, the peculiar initial cry, the convulsive movements, in which the tongue is bitten and the body bruised, the foaming at the mouth and the slow recovery from unconsciousness.

The writers of these accounts only follow the popular superstitions, in describing the disease as of supernatural origin.

It was only in later days, when the study of disease became more scientific and practical, that these superstitions partially died out. But even at the present day, men have not become entirely free from the tendency to ascribe to supernatural origin many things which they cannot otherwise account for. An example of this class of men is the large sect called "Spiritualists."

Editorial Department.

Periscope.

Tea and Coffee as Nervines.

Dr. Lewis Shapter writes, in the *British Medical Journal*, July 9th:—

The only restoratives to the nervous system which have stood the test of time, popular acceptation, and practical usefulness, are infusions of tea and coffee, and such like beverages. It needs no medical knowledge to speak of the increased sense of respiratory power and muscular vigor; the promotion of general comfort and warmth; the cooling of the body, the result of the slight increase of perspiratory functions; and the general restorative feeling when the body is

overcome with fatigue, which is so generally and justly attributed to the use of tea, or, as will be presently shown, its active principle, theine, in the daily experiences of life.

Failing, however, popular acknowledgment, medical and scientific research point to one and the same conclusion, that infusions of tea and coffee are restoratives to the nervous system, and indirectly act as sustainers to the circulation. Chemistry has shown that this action is dependent not upon the multiple constituents of the infusion of the leaf and berry, not upon any complex association of materials, but simply and entirely upon the presence of one substance—theine—which is the active and essential principle of all these and allied substances, and is known to us in the form of silky prismatic crystals soluble in water. The quality of tea or coffee is, therefore, properly determined by the percentage of theine it contains, which varies from three to six per cent., and not by the delicacy and fullness of flavor which is imparted by the volatile oil. Medically speaking, this theine has a totally distinctive action from the infusions of which it forms a part. In the form of an infusion of tea or coffee, we have to deal with a large proportion of astringent matter, in the form of tannic acid, and with the presence of the essential oil, which is an excitant to the nervous system, and is the substance to which must be ascribed disorders of the nervous system which result from tea-drinking, such as palpitation of the heart and sleeplessness. The theine, upon the other hand, of which there is about one tenth of a grain in an ordinary cup of tea, is the restorative agent to the nervous system, and is opposed, in its therapeutic properties, to the action of the essential oil. The infusion, therefore, of tea may induce palpitation in a heart liable to excessive or incoördinate action: but theine, on the contrary, may be looked to, therapeutically, to quiet palpitation; the infusion, by being an excitant, may prevent sleep. Theine, by being a restorative and an indirect sustainer and regulator of the circulation, may induce sleep. Individual medical investigators have, more than this, attempted, from time to time, to show that the action of theine is allied to that of quinine, as, in medicinal doses, the one has proved curative in allied diseases as well as the other, and, moreover, that the nutritive value of theine may bear comparison with that of kreatine, one of the principles of meat.

All this is sufficient to show that theine is already a tried and proved agent, with a recognized dietetic position; and, if it has not hitherto occupied a place supplanting the use of alcohol, it is because (1) it has remained unrecognized as the active and essential principle upon which all the good qualities of tea and coffee, as restorative beverages, really depend, and (2) it has not been presented to the public in a form which would tend to render it acceptable or agreeable. In the form of an aerated water, theine offers the means of supplanting the abuse of alcohol. It forms an agreeable beverage, imparting a somewhat dry flavor to a distilled water, which may be sweetened and flavored to taste, and it offers a means for awakening scientific thought to the study of a simple remedy for a national abuse.

Pasteur's Investigations on Rabies

The Paris correspondent of the *British Medical Journal* writes of M. Pasteur:—

This eminent biologist has made some most important contributions to science, and his name will ever be connected with his ingenious researches on fermentation, and other important discoveries; but he has drifted into a more speculative kind of scientific experiments. As an example of this may be mentioned his recent experiments with the saliva from the mouth of a child with rabies, with which he inoculated rabbits and guinea-pigs. All the animals died, and their blood was found to contain myriads of micro-organisms, which he concluded to be the specific germs that produce hydrophobia. He then performed a second series of experiments, by inoculating other rabbits with the blood of those that had succumbed from the first inoculation. These also died, and their blood was found to contain the same micro organisms. He, however, soon discovered, by further experiments, but this time with the saliva of children who had died from other diseases, that the results were precisely similar to those observed with the saliva of the child. In pushing his experiments still further, but with the saliva of a healthy adult, he met with the same results and the same germs as in the preceding cases. This rather puzzled the persevering experimenter, but he is not so easily beaten; and if he has not yet discovered the real nature of the virus of rabies, he fancies he has laid his hand on the organ that secretes it. According to him, the virus of the rabies is not secreted by the salivary glands, but by the brain—or rather, the latter is the seat of the malady; and in support of his thesis, he inoculated a small portion of the bulbous extremity of the medulla oblongata of a rabid animal under the cerebral covering of a healthy animal. The latter became rabid. These results were recently communicated to the Academy of Medicine, in a paper read by the general secretary for the learned experimenter, which called forth some trenchant remarks from M. Béchamp, who positively refused to accept the principle on which M. Pasteur has hitherto founded most of his theories, and added that it is not outside the body that one must look for the germs or elements of destruction; but they are to be found in our own body, in the form of microzymes, which are the only cause of all fermentation, and the lowest element to which our organism can be reduced. Nothing daunted, however, M. Pasteur continues his parasitic warfare with unbroken zeal; and, by further experiments with human saliva, he has made the startling discovery that the saliva of a person fasting is venomous, as it contains the same parasites as those found in the saliva of children above described; but that, on the person breaking his fast, his saliva is deprived of the venomous quality, as the parasites are taken into the stomach with the food. All this is terrible to contemplate; and even M. Pasteur was confounded, as the result of his experiment was as awful as it was unexpected. The learned biologist made no attempt to offer any explanation, but said that he would for the present only point to the fact, which, he added, was in itself very suggestive.

Morbid Growths in the Ear.

In our report of the Otological department of the International Medical Congress, we inadvertently omitted to mention a paper by Dr. Laurence Turnbull, of this city, on the above subject, and which is of general as well as special interest. In it were enumerated the different kinds of tumor observed in the three parts of the ear, as well as in the cranial cavity, involving the acoustic and other nerves.

Attention was drawn to "fatty metamorphosis of the organ of Corti, resembling sarcoma of the auditory nerve, as described by Moos, amyloid degeneration of the auditory nerve, as described by Voltolini, and corpora amylacea, found in the semicircular canals of man, and described by Lucae.

"*Treatment.*—Where the growths can be reached, the only successful plan of treatment is the early removal by excision by the knife, preventing danger of hemorrhage by the use of the ligature, clamp forceps, thermo- or galvano-cautery. Removal of diseased bone by forceps, sharp spoon, revolving knives, or the surgical or dental engine.

"The most important plan of treatment is the removal of all vascular or polypoid growths as soon as they are brought to the notice of the aural surgeon. All puncturing or irritating of the above growths by means of needles, small, sharp knives, or caustics, is to be entirely avoided, for, in our experience, all such meddlesome surgery tends to increase and inflame them, and may change an originally benign growth into a malignant one."

The Treatment of Club-foot with Apparatus.

Dr. James S. Green, of New York, contributes to the November number of the New York *Medical Journal and Obstetrical Review*, an article in which he argues that a great majority of the most intractable forms of club foot may be treated successfully without the use of the knife. To effect the purpose of safe, comfortable, and certain reduction of chronic club-foot, by mechanical means, he remarks, the instrument must perform the following functions:—

1st. It must effect by extension the separation of the articular surfaces of the bones involved, exactly in the position in which they are presented by the deformity. The extension should be so complete that the synovial surfaces of the tarsal bones will slide over and not upon each other when the foot is twisted into its normal position. (This condition being obtained of itself, reduces to a minimum the amount of force necessary to be exerted in moving the bones, which are thereby not jammed against each other, the synovial membrane and the cartilages injured, and ulceration of the soft parts made imminent.) 2d. It should produce the gradual reduction of the foot to a normal position by continuous stretching, acting exactly in an opposite direction to the lines of the deformity.

In talipes equino varus (the most common form) it should flex the foot, thereby overcoming the contraction of the gastrocnemius and soleus muscles, while at the same time it should abduct the foot, reducing the rigidity of the tibialis anticus and tibialis posticus muscles. It should stretch the plantar fascia, after overcoming the tendo Achillis, and during the reduction of the tibial muscles. Withal, the instrument should be light in weight, portable, and easily worn, so that the patient may assist the cure by walking upon the foot, which is being gradually extended and drawn toward its normal position. It should be so constructed that, as the opposing tissues yield to the applied forces, the advantage gained, be it ever so little, can be easily seized and retained. The "compound club-foot twister," an instrument employed by the author and his associate, Dr. C. F. Stillman, is described as being so constructed as to twist the anterior portion of the foot on the posterior at the medio-tarsal joint, and also to gradually and painlessly alter the angle of the foot with the leg at the ankle joint. It consists of a local extender, provided with a slotted arch for graduated movement, placed each side of the ankle-joint, and another placed in front of the arch of the foot. Below, these are attached to a flexible felt or leather sole, on which the foot is firmly fastened by bandages; and above they are connected to metal terminal plates, which are bound down to the leg by some immobile dressing. This splint allows the foot to be twisted back into shape without pain, as it provides a local extension which relieves the parts from strain and attrition during the twisting, and also allows the patient to walk without interfering with the action of the instrument, the foot being completely under the control of the surgeon. The instrument and dressing used in a case related, weighed thirteen ounces.

Mysophobia.

The following report, by Dr. J. C. Shaw, of Brooklyn, of a case of this rare affection, we copy from the *Archives of Medicine*, for October, 1881:—

E. J., a male, aged 15 years, brought to me by his mother on May 26, 1879.

For the past few years has enjoyed good health. About six weeks ago the first decided symptoms appeared, but for months before his mother had noticed that he was excessively particular to wash his hands very clean, which is unusual for boys, as she remarks. About six weeks ago he began to say to her: "He had been touching the paint; did she think it could come off the wall and poison him?" He would not take off his own hat, but ask her to do it for him; also, to unbutton his coat. If he wished to come in the front door he would not take out his night-key and come in, but would knock on the door with his elbow. He is afraid that if he touches anything with his hands it will poison him; every time he touches *anything* he is very particular to wash his hands very clean. He spat on the carpet a few days ago, and then rubbed it off with his boot; he immediately came down stairs to his mother, told her about it, and asked if she thought he could have got any of the color off the carpet so as to poison him. He would go abou holding his hands and arms away from his body,

as if he were afraid of touching his clothes. When he goes to bed at night he will wash his hands a dozen times and use as many towels; if prevented from doing this he appears disturbed, and will sometimes rush over to the water pitcher and thrust his hands in, which appears to satisfy him. For a short time past he has frequently asked his mother if he had cobwebs on his face, and especially about his mouth. His mother thinks that of late he has presented a vacant, idiotic expression that he never used to have.

When the boy is talked to he speaks sensibly, but will give no explanation of why he is afraid of being poisoned by touching things; says he has frontal headache at times, especially when he goes to school; for the past six weeks has not gone to school, and has not had the headache, but a few days ago had a sharp pain in left occipital region. He looks dull and apathetic; is not given to self-abuse. He has a decided neurotic family history: the brother and father of his mother suffered from some nervous disorder, but no accurate account of it could be obtained; but I infer that it is a mental disorder. The marked neurotic family history in this case inclines me to the opinion that graver mental disorder will be developed in this boy.

The Therapeutic Use of Aloes.

On this subject, Dr. John L. Marsh, of Greenfield, Indiana, writes, in the *Therapeutic Gazette*, for September, 1881:—

Aloes has its peculiar action and its "specific," for certain symptoms, and when given with these symptoms present, will always do good, and not harm, as claimed.

There are other medicines that greatly assist aloes in its action in certain cases. Notably among these are belladonna, hyoscyamus, and nux vomica, of the nervines, and preparations of cinchona bark and iron, of the tonics. The last mentioned article fits in well with aloes in a certain class of cases where the patient is pale, anæmic or cadaverous looking, with poor appetite, nervous, torpid bowels, moving once a week, or two weeks, accompanied with labor-like agony. If the patient be a female, the menstruation will be scant or entirely absent, owing to a general atony of the pelvic organs. Aloes is peculiarly adapted to these symptoms, and with the assistance of iron, will often relieve as no other remedy will. One-fourth to one grain of aloes, and one to two grains of sulphate of iron, given three or four times a day, will have a wonderful effect on the symptons above mentioned. Aloes is *the* remedy for amenorrhœa with these symptoms, and should be given in increased doses just before the expected period. Aloes further shows its curative effect in these cases by the dose required to be given, which, if at first large, can be gradually decreased, until it can be entirely discontinued. With most purgatives given for the cure of constipation the dose has to be increased.

Aloes should usually be given in small doses, and not combined with more active purgatives. The combinations indicated are about all that can be made that will prove serviceable. With its special indication, combined with nux vomica and cinchona bark it makes an excellent tonic. One-half grain aloes, one-fourth grain extract of nux vomica, one-half grain cinchona bark, in pill, or if a more stimulating preparation is needed, make a solution with gin, whisky, or alcohol; this makes a very efficient tonic. Aloes produces its effects in much smaller doses when thus combined than when given alone.

The Hereditary Tendency of Gout.

In a recent lecture published in the *Medical Press and Circular*, Mr. Jonathan Hutchinson says:—

Gout is very difficult to define, or to explain satisfactorily in accordance with the laws of inheritance. Its peculiarity may best be described as an unhealthy condition of the blood, due to accumulation in it of uric acid and of salts; probably, too, in gouty patients, there is some kidney affection, advancing gradually to definite disease of that organ, and with this and the increased tension endured through it in the arteries, they undergo structural changes; indeed, it may be said that all the tissues of the gouty subjects undergo changes which result in their being variously modified, all being of necessity influenced by the condition of the blood circulating through them. They are likewise considerably influenced by the inherited tendency to gout, transmitted, as this assuredly is, from generation to generation; and on such persons as are thus affected, cold immediately acts as a test of their condition, and through the effects it produces will demonstrate which tissues of the body are most susceptible or most changed. Gout, in fact, is concerned all with the structures, showing preference for none in particular, and the most certain and useful information about it we can hope to obtain will be that gained from a study of its origin; that is, how it has been primarily induced. This inquiry would lead to the conclusion that it has been gradually *bred* in past generations, and by the action of the same causes as are in this present time serving to intensify it. In fact, gout is now being bred among us by the perpetration of errors in diet, etc.; but it is a difficult matter, nevertheless, to initiate it in those who possess *no* inherited tendency to the disease, and it requires to be perpetuated through several generations in order to acquire a high degree of potency. That gout, however, *is* hereditary, is unquestioned, and thus we have in it a disease acquired originally by indiscretions in diet, and attaining powers which ensure its transmission to succeeding generations. As has been seen, diatheses are influenced by conditions obtaining during the life of the individual, and are modified by other diatheses. Hence, the probable result of intermarriage of a rheumatic person with one in whom gout had developed, would be a hybrid affection, exhibiting the phenomena of both gout and rheumatism, and thus the term "rheumatic gout" is quite justified. It is, moreover, a term which ought properly to be applied to a large number of so-called gouty subjects, and when there is this occurrence of disease possessing the twofold characteristics, there has undoubtedly been a transmutation of diathesis during transmission.

Removal of the Uterus for Cancer.

The November number of the New York *Medical Journal and Obstetrical Review* contains a "special article," by Dr. Andrew F. Currier, of New York, in which the various methods of removing the entire uterus, for cancer, as practiced by Freund, Schröder, Czerny, and others, are reviewed, as well as the general question of the advisability of removing the organ. He thinks the advantages of the vaginal method over that of Freund (by laparotomy) are enormous; there is but one section of the peritoneum; the intestines are unharmed, there is a better opportunity to discover diseased tissue, which is most likely to be situated in the vicinity of the cervix, and most important of all, the patients often survive, which is rare by Freund's method. But most patients are not likely to be benefited by either of these serious operations; the most hopeful cases will be those in which the patients are warned of their danger in the early stages of the disease, and in such cases Schröder's supravaginal excision of the entire cervix is most likely to prove of service. This operation, while not so radical as removal of the entire organ, and hence not so efficient in cases involving the tissues above the internal os, is far less grave, and is, besides, more thorough than amputation of the cervix as it has ordinarily been done in the past. In those rare cases, however, in which the body of the uterus alone is involved, there is no alternative to laparotomy, either by Freund's operation or some modification of it. As to drainage—a most important item in such cases—a perfect system seems impossible, but Bardenheuer's, although in the hands of others it has not fulfilled its author's expectations, affords as good results as any yet devised. As to the broad question of whether cancer of the uterus, and so cancer in general, can be radically cured, the author thinks the logic of events points to its approaching solution.

The Ventilation of Sewers.

The *Sanitary Engineer*, says:—

The system of ventilating sewers by perforated covers at frequent intervals, is now widely practiced both in Europe and this country, and is generally received by engineers as the best method yet devised. Occasionally trouble may arise, but we venture to say that the cause may be removed by proper care. We can say that any foulness must be due to one or both of these two causes, viz: an inadequate number of vent holes, or an unnecessarily foul state of the interior of the sewer. If such foulness exists, it may arise from either one or a combination of several causes, such as the following:—

1st. Improper planning, such as a deficient inclination, or excessive size, or improper form of section, rough materials, irregular gradients, badly devised junctions or branch inlets, angles favoring deposit, etc.

2d. Poor workmanship, such as rough brick laying and bad alignment.

3d. Poor materials, either coarse and rough in texture, or perishable and crumbling from premature decay.

4th. Want of proper care on the part of those having charge of the administration, such as want of flushing and cleansing, which are needed more frequently in some sewers than in others.

5th. Inadequate protection at inlets to guard against the introduction of garbage or offal in solid form, or solid matter which would favor the accumulation of filth, such as sticks, stones, gravel, silt, etc.

In short, if sewers are properly planned, well-constructed, and carefully looked after, the perforation of man-hole covers for purposes of ventilation is not likely to lead to trouble, and such trouble, when it occurs, is generally a symptom of something wrong in one or more of the above particulars.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have recently added to our list of exchanges two new medical journals:—

The *New England Medical Monthly*, edited and published by Dr. William C. Wile, of Sandy Hook, Fairfield county, Conn., contains forty-eight pages of reading matter arranged. The first number has five original communications, besides editorials, book reviews, correspondence, society reports, abstracts from other journals, etc., etc. Judging from the contents of this number, and its general appearance, this promises to be a satisfactory journal. Price, $2.00 per annum, in advance, or 20 cents per copy.

The *Northwestern Lancet*, a semi-monthly journal, edited by Dr. Jay Owens, of Saint Paul, Minn., is as yet a puny little infant, the first number containing but six pages of reading matter, exclusive of advertisements, and it appeals to the profession of "the new Northwest," of which it is the pioneer medical journal, to supply it with an abundance of wholesome and nutritious food, in the way of original communications and subscriptions, to enable it to weather the first winter, and there is no reason why, under good management, its growth should not be in proportion to the rapid development of that section of the country which it represents. Subscription only $1.00, in advance.

——The following pamphlets have also been received:—

A Historical Sketch of the Medical Societies of Baltimore, Md., from 1730 to 1880, by Dr. G. L. Taneyhill. This paper was read before the Medical and Chirurgical Faculty of the State of Maryland, Oct. 13th, 1880, at its celebration held in honor of the Sesqui Centennial Anniversary of the Founding of Baltimore, and has been reprinted from the Transactions of the Faculty for 1881.

Optic Neuritis; an essay read before the Baltimore Medical Association, April 11th, 1881, by Dr. A. Früdenwald, of Baltimore, and reprinted from the Maryland *Medical Journal*, Aug. 1st and 15th, 1881.

A contribution to the Study of Fractures and Dislocations; read before the N. H. Medical Society, June 21st, 1881, by Dr. John Randolph Ham, of Dover.

Report to the Illinois State Medical Society, on Laryngeal Tumors, by Dr. E. Fletcher Ingalls, of Chicago; reprint from the Transactions of the Society for 1881.

An Essay on Eye Affections from Malarial Poisoning, by Dr. Charles J. Kipp, Surgeon to the Newark Charitable Eye and Ear Infirmary; extract from the Transactions of the Medical Society of New Jersey.

An Essay on Antiseptic Surgery; read before the Luzerne County Medical Society, Nov. 10th, 1880, by Dr. Geo. W. Guthrie, of Wilkesbarre, Pa., and republished by request of the Society.

Report of Section on Ophthalmology and Otology, by Dr. Samuel Theobald, of Baltimore; reprint from the Transactions of the Medical and Chirurgical Faculty of Maryland, for 1881.

Ovariotomy During Pregnancy, by Dr. H. P. C. Wilson, of Baltimore; a very interesting and instructive report of a case of ovariotomy performed on a lady, when nearly four months advanced in pregnancy, the tumor removed weighing about thirty pounds; the lady recovered, went to full term, and was delivered of a healthy female child, living at the time of this report. This pape comes to us, reprinted from the Gynecological Transactions for 1881.

How is Your Man? A most interesting little book, recently published by Messrs. Lee & Shepard, of Boston, under the above title, vividly portrays that abominable system of graveyard insurance, the most inhuman of all practices to which the cupidity of man could possibly lead; a practice, which has recently spread to an alarming extent over portions of this State. The principal characters in the book are the "Sharks of Sharkville," whose usual greeting, "how is your man?" shows the interest they take in their insured subjects. The story is founded on facts, and though the picture is strong, it is perhaps in no instance overdrawn.

OUR LITERARY EXCHANGES.

——*Harper's Monthly*, for November, closes the sixty-third year of that unrivaled magazine. Its illustrations are increasingly beautiful. The contents of this number are, "In Cornwall with an Umbrella;" "A Week in a Dug-out;" "Journalistic London;" "Ohio's First Capital," and "The Land of the Midnight Sun;" all finely illustrated. A Reminiscence of Arthur Stanly, with an excellent portrait, by Thomas Hughes. The continuation of C. F. Woolson's serial, "Anne," and "A Laodicean," by Thomas Hardy. "Tilghman's Ride from Yorktown to Philadelphia," finely illustrated by the artist and poet, Howard Pyle, is a charming poem. $4.00 a year, in advance.

Scribner's Monthly, or the *Century Magazine*, commences the twenty-third volume with its new name. It is replete in valuable articles connected with painting, sculpture and the drama. Its contents: "The Diligence Journey in Mexico;" "In the Footsteps of Fortuny and Regnault;" "Around Cape Ann;" "Costumes in the Greek play at Harvard," and "The So-called Venus of Melos," are highly and beautifully illustrated. Mrs. F. Hodgson Burnett's new serial, "Through One Administration," commences favorably. We shall miss Dr. Holland's ready pen and cultured mind in topics of the times and other literary departments. Terms, $4.00 a year, in advance.

The *American Agriculturist* for October contains a handsome supplement containing the prospectus for 1882, with a list of four hundred and thirty-three premiums. The *Agriculturist* stands first, in excellence and value, of all other agricultural journals, and is invaluable to every farmer. Orange Judd & Co., New York, $1.50.

Littell's Living Age, issued every Saturday, by Littell & Co., 17 Bromfield st., Boston, contains the best selections of the ablest and most cultivated writers, on literature, politics, art, and science in Europe, especially of Great Britain.

Harper's Weekly is the best illustrated weekly in the country and always contains valuable literary and other articles.

The Germantown *Telegraph*, and *Vermont Journal* are unexceptional family papers; "The *Independent Evangelist*," "The *Presbyterian Banner*," "The *Presbyterian*," "The *Methodist and Zion's Herald*," are regular and welcome exchanges.

BOOK NOTICES.

The Therapeutics of Gynecology and Obstetrics, comprising the Medical, Dietetic and Hygienic Treatment of Diseases of Women. Second edition, thoroughly revised and greatly enlarged. Edited by William B. Atkinson, A.M., M.D., author of "Hints in the Obstetric Procedure," Lecturer on Diseases of Children at

the Jefferson Medical College, etc., etc. Philadelphia: D. G. Brinton, 115 South Seventh street, 1881. 8vo. pp. 571. Price, cloth, $4.00; leather, $5.00.

The first edition of this work having been exhausted in a little more than a year from the time of its publication, and a new edition having been called for, the editor has availed himself of the opportunity thus presented, to thoroughly revise the text of the previous edition, and to make such additions as the rapid progress in the departments of gynecology and obstetrics would necessitate, in order to bring the work fully up to date. Never before has greater activity been manifested in the literature bearing upon this subject than at the present time, and the most recent productions of German, French, and English writers, as well as those of our own country, have been carefully scanned, and nothing left out which seemed of value. A few less important and rather obsolete passages of the first edition have been omitted, yet so extensive have the additions been, that they have increased the volume by *two hundred and six* pages, bringing it up to the size of the first two volumes (*Medical Therapeutics and Surgical Therapeutics*) of the *Modern Therapeutics Series*, of which it is the third, and the list of authors represented comprises no less than *five hundred and fifteen* names, among which are *one hundred and nineteen* that did not appear in the first edition.

The general plan of arrangement remains the same as that of the previous edi ion, the volume being divided in nearly two equal parts, the first on gynecological therapeutics, the second, on obstetrical therapeutics. Each part is again subdivided into three chapters. The first chapter of Part I treats of Diseases of the Ovaries, Disorders of Menstruation and General Diseases; the second treats of Diseases of the Uterus and its Annexes; and the third, of Diseases of the Vagina, Urethra and Bladder. The three chapters of Part II treat respectively of the "Disorders of Pregnancy," "Complications, Disorders, and the Sequelæ of Parturition," and "Diseases of the Mammary Glands and Lactation." Among the more important additions, we note: (1) An introductory to the first part, containing (*a*) General Remarks on the Treatment of Diseases of Women; (*b*) Balneo therapy in Diseases of Women, and (*c*) Plan for a Gynecological Examination; (2) An introductory to the second part, on Case Taking in Midwifery; (3) Abstracts of papers on Antiseptics in Labor, by various authors; also on Disorders of the Eyes in Pregnancy, Placenta Prævia, Coccyodynia, Fetid Menstruation, and others interspersed throughout the work. Besides these additions, something new has been added to the therapeutics of nearly every disease mentioned in this volume.

The work, as now issued, is a faithful presentation of the most approved therapeutic methods in diseases of women, as set forth by the most eminent authorities of modern times. The original text of the authors quoted has generally been followed, and the exact formulæ most frequently prescribed by them have been reproduced. It has been objected by many—and not without some show of reason—that to furnish physicians with ready-made prescriptions would be to encourage routine practice, and would surely lead to neglect of study; yet they are found in nearly all text-books on practical medicine, and whatever may be said against them when they represent the mode of treatment of one physician only, we believe that in a work of the kind before us, when properly made use of, they rather serve to stimulate the practitioner to further investigation. To illustrate: We wish to look up the treatment of a given disease, say dysmenorrhœa. We find at once a brief résumé of the treatment adopted in the various forms of this troublesome affection, by no less than thirty-one eminent practitioners, and the active remedies employed by these number nearly thirty. Of these we select those which appear to us most suited to the case we have in hand; we read up on the action of these remedies and their therapeutical application, in such works on materia medica and therapuetics as we have at hand; we, perhaps, go further, and procure the original works or journals whence the abstracts in this work are taken, in order to familiarize ourselves more thoroughly with the views therein set forth; we at last select our remedies and make up our prescription: this, we may do quite independently of the formulæ before us, or, selecting one of these, we may omit any ingredient we deem useless or contra-indicated in our case, and add whatever to us seems indicated. We have now become thoroughly interested, and while we watch the effects of our first prescription, we will be sure to study up the other methods of treatment to which our attention has been drawn. It may again be objected that some physicians will not study if they can avoid it; but as these will still practice, until prevented by law, it is better, both for them and their patients, that they have somebody else's treatment to guide them, than nothing at all. In conclusion, we wish to say that the *Modern Therapeutics Series* represents in itself the most complete library on practical medicine, probably, found anywhere.

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AN ACTIVE STATE BOARD OF HEALTH.

The Board of Health of the State of New York is setting about its work in a most energetic and commendable manner. It has published a series of directions for local boards, stating their organization, powers and duties, and has been distributing, widely, the act for the Preservation of the Public Health, passed by the Assembly last winter. This act is lengthy and is very carefully drawn, so as to provide effectively for the working of local Boards without conflicting with municipal and other authorities

Another document of universal interest is a circular containing a series of model sanitary regulations, drawn up for adoption by local health boards. The first section of these proposed regulations declares that whatever is dangerous to human life or health, should be declared illegal.

The following sections provide for the purity of drinking water against contamination by privy vaults and wells; against throwing offal in the streets; against injuries from the refuse matter of manufactories; and against the selling of any spoiled or adulterated articles of food. The article in reference to the management of cases of infectious disease is stringent, but not too much so. We quote it in full:—

Any householder in whose dwelling there shall occur a case of cholera, yellow-fever, typhus or typhoid fever, scarlet fever, diphtheria or smallpox, shall immediately notify the board of health of the same; and until instructions are received from the said board, shall not permit any clothing or other property that may have been exposed to infection, to be removed from the house. Nor shall any occupant change his residence elsewhere, without the consent of the said board, during the prevalence of any public danger from said disease; and all physicians and other attendants upon any person sick with smallpox, cholera, typhus, typhoid or scarlet fever, diphtheria or other disease dangerous to the public health, shall forthwith report the same to the board of health. And it shall be the duty of such physicians and attendants to avoid exposure to the public of any garments or clothing about their own persons that may have been infected from exposure to any diseases.

Persons having infectious diseases are also forbidden to enter the city limits; and those dying by such are forbidden to receive a public funeral. The next section provides for the proper slaughtering of cattle; that cattle affected with contagious disease must not be brought into the town limits; and an animal having glanders or farcy, must not be used or retained within the corporate limits.

Special directions are recommended to prevent the erection of manufactories or places of business detrimental to health, and to subject hotels, boarding houses, and the like, to the regular inspection of the health officers. Finally, the adulteration or watering of milk is prohibited.

With these general directions a special circular is added, giving the rules to be observed in the public registration of deaths, births, and marriages, and in the regulation of burials. Besides the usual certificate of death and burial permit, a rule is given which is to be observed in the burial of those who die of acute contagious diseases. It is that no public funeral, no opening of the coffin, and no transportation (unless in a sealed metallic or lead-lined coffin), by public carriers beyond the nearest appropri-

ate burial place, should be permitted in the case of those who die of diphtheria, scarlet fever, measles or typhus. The corpse should be wrapped in strong disinfectants until buried.

In reference to marriage records it is ruled that on the day of a marriage, and while the proper witnesses are present with the married couple, the record should be made out and signed by them, according to the forms required by the State. *The person who legally solemnizes or attests the marriage ceremonial, must certify his official act*, in the prescribed form; after which it is his duty to make sure that the record and certificate are placed in the hands of the local registering officer within three days after the marriage.

The system of recording prevalent diseases is an important feature of the plan. The new laws require that every local Board of Health shall report to the State Board every case of smallpox and varioloid, and the facts relating to epidemic, infectious, and prevalent diseases; and it is made the duty of each local Board to receive, and examine into, the complaints made by any inhabitant concerning causes of danger or injury to the public health. Each local Board has power to take whatever action is necessary to prevent the spread of dangerous diseases, and the laws require that the State Board of Health shall give any necessary information and advice in such duties. Blank forms are furnished to physicians on which to prepare their reports and forward them.

Special circulars of inquiry have been prepared, and distributed by the State Board on various subjects of general and immediate interest. One of these is on school buildings and the hygiene of public schools; another is on miasmatic diseases and malaria. Forms for filling in replies, etc., are provided by the Board.

These plans and rules are in the highest degree praiseworthy. They will redound to the benefit of the State and its citizens; they are a credit to its civilization; while it remains a standing discredit to the citizens of Pennsylvania and other States, that they have created no Board of Health, and this most vital interest is totally neglected.

Notes and Comments.

Some Observations on the Brain.

The dog's brain is no larger than that of sheep, and is smaller than the ox's. In the elephant we find that organ weighing three times as much as in man. The whale and other cetaceæ, have brains superior to that of man.

When the weight of the encephalon is compared with that of the body, we find that in man it is relatively smaller than in several species of monkeys, (the ouistiti for example), the sparrow, the tom-tit and the canary. The dog also has relatively less than the bat, the horse than the rabbit.

If the circumvolutions or varied and irregular folds noticed on the brain of certain animals are, as some authors consider them, evidences of superiority, it will be found that the ass has fully as many, and the elephant more than man.

It is generally admitted that a man whose brain weighs less than 1000 grams, is necessarily deprived of intelligence. Physiologists are not, as yet, agreed on the question as to the age when the brain attains its maximum weight, and as to whether there exists such a period as that when that organ decreases or atrophies. According to Mr. Gratiolet, "the brain grows constantly, at least among the Caucasian races, from early childhood to decrepid old age."

It is said that Cromwell's brain weighed 2238 grams; that of Lord Byron, 2238; that of Cuvier, 1829; but these figures, which are not incontestable, prove nothing. Raphael, Descartes, Voltaire, Napoleon, Schiller, and many other illustrious men had small heads, and their brains could hardly have greatly exceeded the average weight, which varies from 1328 to 1424 grams.

Latent Meningitis in Pneumonia.

M. Ch. Firket, in a recent interesting memoir ("Contribution à l'etude de la meningite latente chez les pneumoniques") remarks that these meningitic complications, and particularly the occurrence of acute meningitis in pneumonia, have long occupied the attention of pathologists (Guersant, Andral, Chomel, Briquet, Grisolle, Rokitansky).

The appearance of cerebro-spinal meningitis in Germany, in 1863, caused particular attention to be devoted to the relations existing between

inflammations of the lungs and those of the meninges. Since this epoch a number of works have appeared on the subject (Immerman and Heller, Maurer, Verneuil, Suragne Laveran, Barth and Houlin). From these numerous researches an interesting fact was discovered; it was found that when meningitis appeared during the course of inflammation of the lung, the symptoms were not at all so violent as in ordinary acute meningitis; in fact the meningitis often passes unperceived or the symptoms are so vague that they are not sufficient to establish a decided diagnosis. M. Firket observed in the post mortem amphitheatre at Liege three cases of this kind, remarkable on account of the complete absence of symptoms.

These were three cases of croupous pneumonia, but no sign attracted special attention to the cerebro-spinal centres, and yet in all the three subjects post-mortem examination revealed an already purulent exudation in the cerebral meninges. The lesions were superficial, the membranes being easily detached from the cortical layer, which was not affected.

In the cases mentioned by the author, alterations were also found in the pleuræ, the pericardium and the endocardium. M. Firket, seeking to establish some relationship between these different lesions and at the same time between the meningitis and the lung disease, considers that this form of meningitis is, as well as the other lesions in the pericardium, etc., the result of a species of general infection of the system by microscopic organisms (Klebs), or otherwise.

Ergot in the Treatment of Lead Palsy.

According to Dr. J. A. Stites, of Belmont, Nevada, in the *Therapeutic Gazette*, for October, 1881, about fifty per cent. of the physician's practice there consists of cases of lead poisoning, the symptoms being in most instances well marked, while in the remainder they are more or less masked. Of the remaining fifty per cent. of practice, the bulk is furnished by accidents and syphilis. The occupation of the male population is mining in silver ore, which is largely associated with lead. Wrist drop is a very frequent symptom, and paralysis of other forms, even hemiplegia and paraplegia, is not an infrequent complication. In the milder manifestations of these symptoms, a cathartic of sulphate of magnesia followed by iodide of potassium, usually removes them in a few days, enabling the sufferer to resume his work.

Persons who abstain from alcoholic stimulants, keep their bowels open, and lead a regular life, are much less apt to suffer from lead poisoning.

In hemiplegia and paraplegia due to lead poisoning, he has found ergot in combination with iodide of potassium and nux vomica to expedite recovery. He has tested its efficacy by comparison in the Nye County Hospital, adopting three varieties of treatment. 1st. Iodide of potassium alone. 2d. Electricity with tonics and nux vomica. 3d. Iodide of potassium and ergot. The latter plan has been attended with the utmost satisfactory results. The following is his standard prescription:—

℞. Potassii iodidi, ℥ij
Ext. ergotæ fluidi, ℥ij
Ext. nucis vomicæ fluidi, ℥ij
Tr. cardamomi co., ℥ij
Syrupi, q. s. ad ℥iv. M.

Sig.—A tablespoonful night and morning.

Usually in a month the power has been restored to the paralyzed parts. Under other forms of treatment recovery does not usually come under three months. The efficacy of ergot is attributed to the well-known physiological action of ergot on the non-striated muscular fibre. The dangers which were formerly supposed to be attendant on the prolonged employment of ergot, such as gangrene, etc., are, he says, certainly not to be apprehended from his experience in the therapeutic employment of the drug.

Note upon Certain Bilateral Anomalies of the Obturator Artery.

Dr. A. H. P. Leuf, of Brooklyn, N. Y., reports in the *Annals of Anatomy and Surgery* for November, 1881, the following observations which are of interest in connection with the subject of operations for the relief of strangulated femoral hernia. It will be seen that the second anomaly mentioned in this note would not necessarily be followed by hemorrhage from incisions in the usual direction. These observations were made in the dissecting-room of the Long Island College Hospital.

In one subject, on both sides, the obturator artery arose from the inner side of the femoral artery, 1 centimeter below Poupart's ligament; thence going forward along the inner side of the vein it passed through the femoral ring, hugging the edge of Gimbernat's ligament. After leaving the ring, both vessels pursued their normal course.

In another subject both the obturator arteries arose immediately underneath the ligament of

Poupart, so that it was difficult to tell whether they came from the external iliac or femoral. Both vessels passed downward from their origin, forming a loop about 1 centimeter long. On both sides, this loop and its retaining branch were situated between the femoral artery and vein, and passed through the ring, hugging the pectineal ridge behind the vein and close to the artery. Thereafter the course and relations of both vessels were normal.

The right obturator artery of another subject arose from the femoral at its beginning, and entered the pelvis at the inner side of the ring. The obturator of the left side differed from its fellow only in origin, which was from the lower end of the external iliac.

Remarkably Slow Pulse.

Dr. J. A. Rice, of Bridgeport, Conn., gives, in the *Medical Record*, the following account of personal observations on the rate of his heart beat: "Lying down, thirty-six; sitting, thirty-eight; standing, forty-one; after walking one mile, forty-three; after walking two miles, forty-six; after violent exercise, fifty two per minute. Beat counted at the apex beat, to avoid error. The other members of my family have natural pulses. I first noticed my peculiarity eight years ago, since which time it has not changed. I have not been sick enough to know what effect a fever would have on it. I have no valvular lesion or other trouble with the organ, though it is at times a little irregular. My health is at all times excellent. I know of no cause for the slow rate. My age is under thirty."

The Local Application of Chloral Hydrate in Throat Affections.

In a paper read before the Northwestern Ohio Medical Association, and published in the Detroit *Lancet*, for July, 1881, Dr. G. A. Collamore speaks of a species of sore throat, characterized by moderate swelling of the tonsils and adjacent mucous membrane, pain in deglutition, and a peculiar cherry-red or purplish-red hue of the tonsils and pharynx. On the tonsils appear spots of whitish or yellowish white color, the size of a grain of corn or less. These are composed of the aggregated secretions of the tonsillar glands, and are readily detachable, leaving the mucous surface unabraded. There is, moreover, a moderate, sometimes high, grade of fever, and decided prostration of the system. The disease is properly a follicular tonsillitis, though the inflammation is not confined to the tonsillar surfaces, but affects the palatine and pharyngeal mucous membrane also, and is liable to be mistaken for and called diphtheria, from which a little care in observation will differentiate it.

In these cases, combined with suitable systematic remedies, chloral acts in a kindly manner as a local application, either as a gargle, a grain or two to the ounce of water, frequently used, or in a stronger solution applied with a camel's hair brush or a swab. A small quantity of the gargle may be swallowed after each gargling, in order to apply it to the lower pharynx. Employed in this way the author has found chloral a very valuable remedy.

Special Reports.

NO. XIX.—LARYNGOLOGY.

(*Concluded from page* 556).

ACUTE TONSILLITIS.

This very common throat affection is probably best treated with *guaiacum*, a drug more used in this disease in England than with us. Our own experience is very decidedly in its favor. We select a case of ordinary acute tonsillitis from a London hospital for children, reported in the London *Medical Press and Circular* lately, to show a typical treatment of a common case:—

E. H., æt. 11½, came as an out-patient on May 18th, having had severe sore throat and difficulty in swallowing for four days. The child was evidently much distressed, and complained of great pain on the right side of the neck when any attempt at swallowing was made. The face was flushed, the skin all over the body very hot; pulse very full (120); tongue brown; breath very foul; severe headache; bowels constipated. She had taken nothing but liquids for three days.

Throat on Examination.—The soft palate and pillars of the fauces are tense and markedly congested—the right side far more so than the left, where the soft palate is pushed forward by the corresponding tonsil. The right tonsil is greatly enlarged, extending beyond the mesial line. On the anterior surface are two small yellow points, almost coalescing. The whole tonsil is very tense and globular. The uvula is also much swollen, and is, as it were, "glued" to the right tonsil; glands beneath right lower jaw much enlarged.

As the breathing of the child was distressing, and the pain great, it was decided to puncture the tonsils, and this was done with a sharp-pointed bistoury, and quite a drachm of thick, yellow pus was let out. There was no immediate marked relief, but the child was placed in a special ward, in a *steam tent*, and the following mixture was ordered--

℞.	Tinct. guaiaci ammoniati,	℥ ss
	Mucilag. tragacanthæ,	℥ j
	Aquæ, ad.	℥ ss.

t. d. s.

Port wine, 4 oz., milk, beef tea.

This was at 4 P.M., and by midnight the child was sleeping quietly. The breathing was somewhat harsh, but not in the least distressing.

May 19th.—The throat on examination this morning shows the right tonsil much decreased in size; still discharging pus; this discharge continued until May 22d, but the inhalation of steam, the treatment by guaiacum, and the above diet were kept up until the 25th, or for one week from admission.

The other tonsil did not become affected, as is frequently the case, and the patient went out well on June 5th.

During the last week in the hospital she was ordered—

℞.	Potass. chlorat.,	gr. x
	Tinct. ferri perchlor.,	♏x
	Aquæ,	℥j.
b. d.		

No fomentations or poultices were applied to the throat.

LARYNGOSCOPIC SIGNS OF LESIONS OF THE MOTOR NERVES OF THE LARYNX.

This was the subject of two papers at the recent International Medical Congress:—

Professor GERHARDT, of Würzburg, read one, of which the conclusions were as follows:—

Destruction of the root of the accessory nerve, or of the trunk of the pneumogastric nerve in the neck, produces complete immobility of the vocal cord in the cadaveric position. Destruction of the superior laryngeal nerve, or of its external branch, produces slight changes in form and mobility of the vocal cord, which are not quite uniformly described. They refer to the act of phonation, and especially to the form, the level, and the visible vibration of the edge of the vocal cord; and further, to prevention of the active lowering of the epiglottis. Destruction of the recurrent laryngeal produces cadaveric position of the vocal cord. If the superior laryngeal nerve be cut in animals after the inferior, the form of the glottis is still further changed. In man, the difference between paralysis of the pneumogastric nerve, and of the recurrent nerve (*i.e.*, the influence which the crico thyroid muscle is still able to exercise when all other muscles of the vocal cord are disabled) is still to be ascertained. Slowly acting pressure on the inferior laryngeal paralyzes first the adductors. Exclusive paralysis of the posterior crico arytenoid muscle causes well marked abduction of the vocal cord, still more complete adduction in inspiration, and normal vibration of the vocal cord during phonation. There is some reason to believe that the secretory functions of the laryngeal mucous membrane are also influenced by the laryngeal nerves.

Dr. G. M. LEFFERTS, of New York, also read a paper, in which he suggested the following five great classes:—

1st. The result of complete, usually acute, morbid implication of the nerve centres, or of the main nerve trunks, the lesion being either unilateral or bilateral, and the vocal cord or cords assuming the cadaveric position. 2d. The result of incomplete, usually slowly, progressive lesion of either the nerve centres, or more commonly of the nerve trunks; in their course. certain nuclei of the former, or certain fibrils of the latter alone being implicated, certain muscles alone are paralyzed—the abductor muscles of the glottis presenting a peculiar proclivity in this respect, and practically being the only ones thus affected; the lesion may be unilateral or bilateral. 3d. Paralysis of individual muscles of the larynx, the result of implication of certain peripheral nerve twigs, by local or intra-laryngeal lesion. 4th. Paralysis of single or groups of laryngeal muscles, the result of simple myopathic change in said muscles. 5th. Motor paralysis; functional in their nature, the abductor muscles being the ones commonly affected, the abductor very rarely.

EXTIRPATION OF THE LARYNX.

Professor A. CECCHERELLI has published recently (*Lyon Médical*) a short account of the operations for complete or partial extirpation of the larynx performed up till now, with a statement of the results obtained. The operations included in the list amount to thirty in number, of which twenty five were cases of total extirpation, and five cases of partial resection. The operation has been performed eighteen times for a carcinoma. In twelve other cases, the tumor was either not of a maligant nature, or the nature of the lesion for which the operation was undertaken was not recognized. Of these thirty cases, cure is said to have been obtained twenty times; and in the twenty-first case, the result is unknown. Twenty of the individuals, however, who recovered from the operation, succumbed later with symptoms of early relapse. The final result, then, shows eleven undoubted cures, or, at least, considerable prolongation of life, and one doubtful case. Professor CECCHERELLI's conclusions are the following: 1. Extirpation of the larynx is an operation henceforth included in surgical therapeutics; 2. It is best carried out by the thermo-cautery; 3. It should be reserved for those cases in which the lesion is not too diffused for the successful attack of the surgical knife; 4. Tumors of a malignant nature are not suitable to the operation; 5. The operation is very admissible in cases of carcinoma, but only when it is limited, and when the case is not one of soft cancer, and the disease has not yet produced general inflammation.

This topic also came up for discussion, before the Sub-section on Diseases of the Throat, at the recent International Medical Congress. One paper on it was read by Dr. PHILIP SHECH, of Munich, in which the author said that total extirpation was indicated:—

1. (*a*) In all malignant new formations, which,

while attacking large tracts, or more than half the larynx, have spared the neighboring parts; (*b*) In cases of dysphagia due to excessive hypertrophy of the cricoid or arytenoid cartilages, or of their mucous coverings, in which nutrition by means of the stomach pump was impossible, and feeding *per anum* insufficient. It was contra-indicated: (*a*) In all benign neoplasms and multiple papillomata, even if they could not be thoroughly removed by any other method, and recurred repeatedly; (*b*) In perichondritis and necrosis of the cartilage; (*c*) In all malignant neoplasms, which had either already led to carcinomatous affections of neighboring or more remote organs, or to which were added other severe diseases, even if not malignant. 2. Partial extirpation was indicated: (*a*) In highly developed unyielding tubular laryngeal stenosis, and in other forms of the stenosis in which the vocal apparatus had undergone so much destruction that phonation without artificial larynx was impossible; (*b*) In those benign neoplasms of the larynx, in which thyrotomy would be indicated, but was impracticable on account of ossification of the cartilages; (*c*) In those malignant neoplasms, which, while being circumscribed, had affected the cartilage, or which, though infiltrating a larger surface, were limited to one-half of the larynx. It was contra-indicated: (*a*) In simple, dilatable laryngeal stenosis, especially in cases of membranous adhesion of single parts of the larynx; (*b*) In cases of papilloma, even if they recurred repeatedly; (*c*) In malignant neoplasms, which, though unilateral, had infected neighboring or more remote organs.

PHARYNGEAL STRICTURE.

A remarkably severe case of this is reported by Dr. Langreuter, *Deutches Archiv. f. Klin. Med* Bd. xxvii:—

The person was a young man, twenty-nine years old, for some years subject to syphilitic symptoms. The stricture gradually progressed until he was in immediate danger. Tracheotomy was then performed and a tube inserted. The patient recovered promptly, and under the usual specific treatment the general symptoms disappeared. The stenosis arose from a ring-shaped cicatrice, which contracted in healing.

TREATMENT OF LARYNGEAL STENOSIS.

It is maintained by Dr. Ganghofner, *Ann. des Mal. du Larynx*, May, 1881, that mechanical dilatation is especially successful in laryngeal stenosis, provided that the acute stage be passed. The greatest success has been obtained in the hypertrophic form of chronic laryngitis with vegetations in the lower part of the larynx, to which has been given the name of chorditis vocalis inferior hypertrophica. It is of the greatest importance to know what are the indications for laryngeal catheterization in acute œdema of the glottis. In some cases various writers speak favorably for its employment.

LARYNGEAL STENOSIS TREATED BY MECHANICAL MEANS.

A paper on this topic was presented to the Subsection on Diseases of the Throat, at the International Medical Congress, by Dr. Paul Koch, of Luxemburg. The following were the author's conclusions:—

1. Catheterism and "tubage" of the glottis are to be rejected in cases of acute laryngeal stenosis, as soon as the latter endanger life. This rule is especially to be applied in cases of children suffering from croup, diphtheria, and œdema glottidis. Catheterism and "tubage" cannot in any respect replace tracheotomy. 2. In cases of chronic laryngeal stenosis, the first question will be: whether the morbid process has arrived at its end; if not, the appropriate general treatment should be employed, and the final development of the laryngeal affection must be waited for. 3. In cases of chronic narrowing which do not endanger life, mechanical treatment can be employed from the very beginning; but, if there be the slightest danger in delay, prophylactic tracheotomy ought to be practiced forthwith. 4. The low operation of tracheotomy should always be performed in these cases. 5. If free respiration. either *per vias naturales* or through the artifical opening, be secured, the mechanical treatment might be executed, either through the mouth or through the tracheal fistula. 6. If mechanical treatment be unsuccessful, recourse must be had to prophylactic tracheotomy, and to laryngotomy, followed by excision, galvano-caustic cauterization, etc. 7. If laryngotomy and the subsequent treatment is not efficient, they should be followed by partial resection, and the intervention either of a T-cannula or of an artificial larynx.

Others present expressed opinions also favorable to this plan of treatment. One of these, Dr. Hering, of Warsaw, showed, from the statistics of one hundred cases, that the failure of the method depended on the misapplication or want of perseverance in its use, not on its own defects. Dr. Grossman (Vienna), and others, spoke on this treatment, all agreeing as to its value.

DERMIC AFFECTIONS OF THE MUCOUS MEMBRANE.

Dr. E. Lori (*Schmidt's Jahresbuch*, 1, 1881), has described some of the pathological changes in the mucous membrane of the throat. Pemphigus has occurred in his practice in a few cases, sometimes recurrent in form. Miliary eruptions he has frequently seen, and has found them to occur especially in persons of the better class, and in fair health. They are most frequent and conspicuous on the soft palate. In the larynx they are observable everywhere except on the vocal cords. They usually disappear after two or three days, but may continue longer.

Herpes of the pharynx and larynx is common, and is distinguished from the miliary eruption

by the larger size of the vesicles. They occasionally form superficial ulcerations, but the miliary vesicles never do.

ADENOID VEGETATIONS IN THE LARYNX.

Papers on these growths were read at the International Medical Congress, by Dr. W. MEYER, of Copenhagen, and by Dr. LÖWENBERG, of Paris. The former stated the following conclusions:—

1st. The existence of adenoid vegetations in the vault of the pharynx, up to the present, was everywhere verified when looked for. 2d. A cold and damp climate was very likely to favor their development. Other certain etiological factors were youth, family tendency, and cleft palate. The connection with scrofulosis was doubtful. 3d. The symptoms following adenoid vegetations did not depend exclusively upon impeded passage of air through the naso pharyngeal cavity. 4th. The practical importance of adenoid vegetations almost always depended rather upon their situation than on their quantity. 5th. The prognosis of ear-diseases connected with the presence of adenoid vegetations was comparatively favorable. Removal of vegetations was of the highest importance for the cure of concomitant ear-affections. 6th. The presence of adenoid vegetations in certain acute exanthemata (measles, scarlatina), was of prominent prognostic importance. 7th. Neither anterior nor posterior rhinoscopy, nor digital exploration, alone, gave sufficient clue for its physical diagnosis. The last named was practically and scientifically preferable. If possible, all three should be used. Microscopic examination was necessary in dubious cases. 8th. The removal of adenoid vegetations was certain and free from danger. Difficulties of operation sometimes depended upon their hidden position and tough consistence. 9th. Among the operations for removal, those were to be deprecated where neither the finger nor the eye guided the cutting instrument. 10th. The extraordinary tendency of adenoid vegetations to recur, gave to the after-treatment a not less important place than to primary operative removal.

Dr. LÖWENBERG'S paper presented the following results:—

1st. Suppression of nasal respiration and nasal voice, generally accompanied by ear troubles, forms a group of symptoms often met with in childhood and youth, and not due to a nasal or tonsillar affection, but to the existence in the nasal part of the pharynx of tumors composed in the immense majority of cases of adenoid tissue. 2d. In certain numbers of children suffering from this disease, the respiratory embarrassment causes a peculiar deformity of the thorax. 3d. The disease always affects the pharyngeal tonsil, and often simultaneously the lateral walls of the pharynx. 4th. The removal of all these tumors ought to be effected as soon as possible. At any rate, portions sufficient to reëstablish the permeability of the nasal fossa and the Eustachian tubes should be removed. 5th. The tumors resulting from hyperplasia of the pharyngeal tonsils can be operated upon after different methods. The vegetations situated on the lateral walls of the pharynx, and especially those which are in the vicinity of the ostium of the Eustachian tube, are best destroyed by means of a fine galvano-cautery guided by the rhinoscopic mirror.

Papers on the same subject were read by Dr. GUYE (Amsterdam), and Dr. WOAKES. Dr. GUYE dwelt on the prophylactic treatment. Drs. MICHEL, FRANKEL, BÖCKER, and HOFMANN, spoke on the subject, the various speakers recommending different modes of treatment, all insisting that the finger or the eye must guide the instrument used, whether the snare (Michel), the ring knife (Mayer), or the finger-nail (Guye) be employed.

REMOVAL OF LARYNGEAL POLYPI.

In an inaugural dissertation quoted in the London *Medical Record*, June 15th, 1881, Dr. STRAUSS, of Breslau, strongly advocates Voltolini's method of removing laryngeal polypi by means of a sponge, which has hitherto received little favor from the profession. He describes the proceeding as follows: A dry or wet sponge of the size of a cherry-stone or hazel-nut, well fastened to a metal handle, is introduced into the larynx while the patient intones *a*. Here it is held, the laryngeal muscles contracting around it spasmodically until the patient draws a breath, when it is quickly passed between the vocal cords. This proceeding is repeated several times in one sitting. All polypi growing in the larnyx, as far as the upper part of the trachea, can be reached by this method. They are broken off or contused, and afterwards mortify. This is especially the case with the smallest and most firmly attached ones, which have hitherto been the most difficult to remove. No ill effects have resulted from bleeding or from the detached portions falling into the trachea. Voltolini represents this operation as simple, and without danger. He has performed it fifteen times; in seven cases the polypi were removed at one sitting: in three cases in two or three sittings. In four cases, a longer time was required to remove them.

BLOOD CYSTS OF THE THYROID.

M. ONIMUS believes that these can be successfully treated by iodized injection and electrolysis. He relates a case (*Bulletin de Therapeutique*, May, 1881), in which the tumor was about two inches in diameter. M. ONIMUS made a puncture, which gave issue to about 150 grams of a chocolate colored liquid. A carbolated injection was then made by the channel; then an injection of a solution of iodide of potassium of ten degrees of strength. There was then introduced into the cystic cavity, filled with this solution, a

metallic stem placed in communication with the positive and negative poles of the electric pile, of from 24 to 36 elements, while the other pole was applied on the periphery. There was a little hemorrhage. In a short time the cavity refilled itself, and the tumor was as large as ever. The day after the operation there was an attack of intermittent fever, which was only one of those diathetic reminders pointed out by M. VERNEUIL. Four weeks later, he discovered that from the size of an apple the tumor had become reduced to that of a nut, and after that time it decreased in considerable proportion. M. BOINET has also related several cases in which he obtained excellent results after puncture, followed by the iodized injection. It is a mistake to believe that the iodized injection is also followed by acute inflammation, for in the cases to which he alluded there was neither inflammation nor suppuration.

THE CAUSES OF GOITRE.

Mr. G. A. LEBOUR, M.A., Professor of Geology in the University of Durham College of Physical Science, Newcastle-on Tyne, has published a brief paper on the geological distribution of endemic goitre in England. He first examines the data obtained on the subject from carefully conducted studies in France, and next considers the distribution of the disease in England.

"In England, as in France, one point," he says, "and one alone, seems to be established as being common to those rocks on which goitre is found not to occur; the absence of limestone, together with that of metallic impurities, and especially sulphide of iron. In both countries the rocks which support most goitre are such as are both calcareous and metalliferous. But there are plenty of facts to show that metalliferous impurities alone cannot be credited with the origin of the disease, else the Devonian and the granite would not be free from it. Neither will the absence of limestone alone be sufficient to check the growth of bronchocele, else the lignitiferous beds of France and the ferruginous sands of the weald would not support it. On the whole, there is a striking sameness in the geological distribution of the disease in the two countries."

TREATMENT OF GOITRE.

Dr. EDWARD WOAKES, in the *Lancet*, March, 1881, gives the results of his experience of *fluoric acid* in the treatment of goitre. Of twenty cases, seventeen were cured. The treatment extended over a lengthened period. Fluoric acid is not to be regarded as a specific, but rather as a basis of constitutional treatment, with which iron, in anæmic subjects, may be advantageously combined, while, coincidentally with its internal administration, recourse may be had to such local procedures as experience has shown to favor dispersion of goitre. In many cases, the effect of the fluoric acid was immediate. In one case, a large fibrous goitre that had existed for two years was markedly diminished in a week, by the use of half drachm doses of the acid, three times a day. In other cases, improvement goes on up to a certain point, and then the tumor remains stationary. Then an injection of iodine into the substance of the tumor causes absorption to recommence, and often it is only necessary to continue with the acid, or perhaps to employ a second injection. The rationale of the *modus operandi* of fluoric acid, is that it restores the lost contractile function of the impoverished ganglia that supply the *nervi vasorum*, either by acting as a physiological spur to their function, or by furnishing a deficient element in their composition, or without which the nerve currents generated in them are reduced to *nil*.

OPERATIONS FOR GOITRE.

A case of extirpation of a colloid goitre is reported by Dr. RICHELAT, in the *Annales des Mal. du Larynx*, Dec. 1880. The gland was removed through a curved incision with its convexity downwards, extending to the common carotid on each side, and passing immediately above the sternal notch in the median line. The trachea was found strongly curved to the right, and slightly flattened from before backward, but not softened or degenerated. It was intimately adherent to the gland, from which it was removed from below upwards. There was very little loss of blood during the operation. Silk ligatures, which were first employed, were mostly replaced by catgut ones, and the wound was united by wire sutures. There was severe dysphagia for several days, followed at the end of a week by an attack of bronchitis and tracheitis. The result was complete cicatrization of the wound in the fifth week, accompanied by complete and persistent aphonia.

In Geneva, where goitre is very common, its surgical extirpation is comparatively frequent. It is stated in a report of the Cantonal Hospital, in the *Lancet*, June 11th, 1881, that Professor REVERDIN has operated thirteen times for the extirpation of goitre, and Dr. AUGUSTE REVERDIN, four times. Out of these seventeen cases three have died—viz., one case of calcified, suffocating goitre; one case of ordinary suffocating goitre; and one case of cancer of thyroid, with thrombosis of jugular vein. Out of the remaining fourteen operations, twelve have healed by first intention, sometimes with little fistulæ lasting for a time, and two have healed by second intention.

EXOPHTHALMIC GOITRE.

M. Tillaux presented at the séance of the Societé de Chirurgie, May 18th, 1881, a patient presenting a very enlarged thyroid gland with very marked exopthalmia, and all the symptoms (palpitations, etc.), usually observed in such cases.

He determined to remove the enlarged thyroid gland, which he has already done in several cases sucessfully, but as soon as chloroform was administered, very marked and menacing symptoms of asphyxia supervened. As the life of the patient seems menaced unless the gland be removed, M. Tillaux asks the advice of his colleagues as regards operating. MM. Verneuil and Duplay are of opinion that it would be dangerous, and the removal of the gland of no benefit, because of the advanced stage of the malady.

At the next meeting M. Tillaux informed the Society that he had operated.

The operation did not prove exceedingly difficult, although it was necessary to dissect the vessels and nerves of the carotid region. The patient is doing well, breathes and swallows with facility; the palpitations, etc., have ceased, the exopthalmia is much diminished, and the patient feels that the eyelids are too large for the eyes." The operation was performed without chloroform, but the patient took, three-quarters of an hour before the operation, three grams of chloral in forty-five grams of syrup of morphine (Fr. codex); notwithstanding this, the patient suffered somewhat during the operation.

Correspondence.

Pregnancy with Procidentia.

Ed. Med. and Surg. Reporter:—

In the summer of 1874, I was called twenty-five miles, to the town of Elysville, B. and O. R. R. R., to see Mrs. P., who was laboring under "procidentia uteri" when enceinte. I believe such cases are comparatively rare, and hence, of the deeper interest to us as a profession.

Leishman in his System of Midwifery, edition of '79, page 287, speaks of a case of this kind, which, it is said, came to full term, with a favorable delivery. Mine, however, was not so fortunate, so far as the child was concerned. I did not see the case, however, until it had passed through several months' treatment, first and last, by another physician. Nor should I have seen it at all, had not the family become impatient, and so frequently solicited my presence and opinion. This proceeding vexed the attending physician, and taking umbrage thereat, he left the case abruptly, at a moment when I had been led to believe that he had sent for me, and appointed an hour for meeting.

When I arrived there, however, I found ad been led astray by the Doctor's abrupt action. Seeing the poor woman thus at the mercy of chances, I appointed her mother and two highly reputable ladies to witness my examination, and began to investigate the case. It was in warm weather and she had only a sheet over her.

On entering the room, I beheld an enormously swollen abdominal and infra-thoracic region; the extremities were atrophied, eyes protruding, lids contracted, bones of the face prominent, lips contracted, and teeth exposed, in all, a ghastly appearance.

On placing hand beneath the cover, to palpate the swollen surface, I found considerable tympanites, with some effusion, and whenI essayed to make a vaginal examination, my hand was excluded by a tumor of some kind lying outside, with a connecting portion in the place where I had expected my hand to enter.

Having obtained permission, I removed the cover and saw at a glance, the womb lying prominent between the thighs. It offered a favorable opportunity to see that glued condition of the os common to the gravid state which authors tell us about, but which we are not fortunate enough to see very often in the living subject. I might compare it in appearance to the filmy and convex appearance of the eyeball of a bull, recently dead.

Being satisfied with externals, I next directed my attention to the internal system, and after an investigation I was convinced that no organic lesion existed.

Having been informed by the patient and her mother that the physician had at first diagnosed the case (to use their own terms), "loss of the monthly courses," and that he had used the hip bath, and many relaxing remedies, etc., and finding nothing wrong but what depended on the mistaken treatment and its consequences, if such had been the treatment, and at all events, to the uterine and attending troubles, I diagnosed the case as herein already described.

It was plain to my mind, that the treatment was to enter largely into the secretory functions, and a local application to the swollen surface and to the womb, was all I felt like undertaking there. I did not see that I could reduce that uterus, nor, did I attempt to unload it by instruments or manipulation of any sort, save the application of a cooling astringent antiseptic lotion.

Here is my treatment:

℞. Ant. et potass. tartrat., gr.¾
Hydrarg. chlor., mitis, gr.vj
Potass. nitratis, gr.xxiv. M.
Et in pulv. xij divid.

Sig. One powder in syrup 3 times a day, alternating with—

℞. Potass. bitart., ℥vj.
In pulv. xij divid.

Sig. One powder three times a day in a little syrup, alternating with the former.

℞. Potass. chloratis,
Potass. nitratis,
Pulv. alumin.,
Plumbi subacetatis, āā ℥j
Aquæ font., Oiss. M.
Ft. sol.

Sig. Bathe the womb thoroughly every four hours.

℞. Ol. olivæ, ℥ ij
Tinct. camph.,
Aquæ ammon.,
Tinct. opii,
Ol. monardæ,
Perchloride of amyl, āā, ℥ j. M.
Ft lin.

Sig. Bathe over the entire swollen surface three times a day.

In twenty-four hours the uterus contracted considerably, discharged its several days' defunct contents (about three months gone), and continued to reduce its dimensions. The diet I directed should be Graham mush and sweetened cream, wild fowl, tenderly prepared, farina, etc.

Finding in a few days that a very favorable impression was being made, I continued the treatment (without the calomel, however) for several days longer. The secretions began to be restored, the abnormal condition to yield, and the womb had started home, unladen of its unfortunate contents.

I used no manipulation whatever, but let the *vis medicatrix naturæ*, assisted by the lotion named, complete the return of the uterus to its normal position in the pelvic cavity. This was completed in about three and a half weeks, and by this time a course of the following prescriptions, which had in due time succeeded the former, had well nigh exchanged the other and functional abnormalities, for a perfect state of health.

℞. Potass. iodid., ℥ ss
Ext. sarsaparillæ, fluid, ℥ ij. M.
Ft. sol.

Sig. Teaspoonful in a wineglass of soft water two hours after each meal.

℞. Potass. bitart., ℥ iij.
In pulv. xxiv divid.

Sig. One powder in a little sweetened water one hour before each meal.

This, I found, answered my expectation for about a week, and then I prescribed—

℞. Tinct. cinch., comp., ℥ ij
Acid sulph., aromat., ℥ iss. M.
Ft. mist.

Sig. Teaspoonful in a wineglass of soft water one hour before each meal.

℞. Syr. iodid. ferri, ℥ j.

Sig. 10 to 15 drops in a wineglass of soft water two hours after each meal.

In about two weeks more I prescribed—

℞. Precip. carb. ferri, ℥ j.
In pulv. xlviii divid.

Sig. One powder in a little syrup two hours after each meal.

And therewith I finished up the case, having used at intervals during the treatment the *Potus Imperialis* of the U. S. Dispensatory, and conducted the dietary along by degrees, and now have the pleasure of assuring the skeptical that the lady and the witnesses of my examination and treatment are still living to testify to all stated herein. The lady herself is, since her recovery, "the joyful mother of many children."

P. J. Gardiner, M.D.

News and Miscellany.

An Apology Made.

We express our regret to our readers for having admitted in this journal (Oct. 29), a letter from Dr. M. M. Griffith, of Bradford, Penna., in which he brought forward the merits of "petroleum mass." We knew nothing at the time of Dr. Griffith, or his interest as a dealer in this harmless stuff. We have now before us a circular, in which he advertises over his own name his "crude petroleum pills" as "a positive cure in all cases of acute tuberculosis;" in which he also offers to give his "personal attention gratuitously" to patients. His envelopes are stamped with his name as "proprietor of crude petroleum pills, a cure for consumption and all diseases of the throat and lungs."

This is enough to show the professional standing of Dr. Griffith, and we hope the journals which, like ourselves, have admitted his article will govern themselves accordingly. We are ourselves always glad to be informed when we are caught napping in this manner.

Trials of Editors.

The *Southern Practitioner*, published at Nashville, Tenn., stands unrivaled, as we once before remarked, in the medical press, for the quality of its Billingsgate. Its last display of ability in this direction was an attack on Dr. Julius Wise, editor of the *Mississippi Valley Medical Monthly*. The wording and spirit of this onslaught were such as to show that the writer, whoever he was, is unfit to be recognized by gentlemen, and we are surprised that Drs. Duncan Eve and Deering J. Roberts, editors of the *Practitioner*, allow such a fellow to write for their journal. It must make those gentlemen sick at the stomach to have to assume the responsibility of fathering the drippings from his nasty pen. We pity them.

Personal.

—Professor Busch, of Bonn, who performed a successful operation on the German Empress recently, has received the Great Cross of the House of Hohenzollern, accompanied by an autograph letter from the Emperor, signed, "your grateful king, William."

Items.

—A coroner's verdict lately read thus: "The deceased came to his death by excessive drinking, producing apoplexy in the minds of the jury."

—Like a brass band for the deaf: A Vermont man has willed his picture gallery to a blind asylum. The patients are supposed to be the only persons who can really appreciate the collection.—*Boston Commercial Bulletin.*

—M. Labouchere says, in *Truth*, that the late Baron James de Rothschild incurred losses on the Bourse in October amounting to 80,000,000 ($16,000,000), and that his anxiety caused the bursting of an aneurism.

OBITUARY NOTICES.

—Dr. T. Clay Maddux, of Baltimore, was shot dead on election day, in a political quarrel, at Odenton, Md. He was born in Fauquier County, Va., February 10, 1836. He graduated at the Alexander Academy, with distinction, in 1851, matriculated at Winchester Medical College in 1858, and took his degree as Doctor of Medicine two years afterwards. At the breaking out of the war he went to South Carolina, where he was appointed a surgeon in the Southern army, and performed his first service at Fort Sumter. He afterwards returned to Virginia, where he served in the Confederate volunteer army as surgeon, to the end of the war, having been present at the battles of Bull Run, Seven Pines, and the seven days' battles of the Chickahominy. When the war was ended he resumed the practice of his profession in Richmond, pursuing it until the autumn of 1867, when he removed to Baltimore.

—Dr. Edward T. Dale graduated at Long Island College Hospital, in the year 1873, and in the fall of that year began the practice of medicine at Fulton, Ark., being associated with Dr. R. B. Christian, of that place. In the early part of the following year he moved to Texarkana, where by constant application he succeeded in building up a large and lucrative practice. His deep interest in all public affairs thoroughly identified him as a leading and most useful citizen. Dr. Dale was one of the organizers of the State Medical Society of Arkansas in 1875, was one of its first vice presidents, and in 1879 was elected president, which position he filled most creditably both to himself and to the Society. He was also a member of the American Medical Association. He died suddenly, at Little Rock, Ark., on Sept. 19th.

—Dr. William B. Hahn, an old and reputable physician of Montgomery county, died Nov. 3d, aged eighty-two years and five months. Dr. Hahn was born at Somerton, N. J., June 3d, 1799. He studied medicine with Dr. George Van Buskirk, of Pottstown, and graduated at the University of Pennsylvania, April 22d, 1822. He was a member of the House branch of the Legislature of Pennsylvania, having been elected on the Democratic ticket in 1840, and served in the sessions of '41, '42 and '43.

—Dr. Ambrose Goertz, a Russian physician, practicing in New York City, was found dead, probably from poison self-administered, one day last week. He was at one time physician to the Russian legation in Japan, and came to this country as medical adviser to the Grand Duke Alexis. He lost favor with the Russian government on suspicion of a tendency to Nihilistic political theories. At his death he was about forty years of age.

—Dr. J. J. Youlin, a prominent physician of Jersey City, died in that city, on October 30th, of heart disease. His age was 60 years. He had been troubled with an affection of the heart for some time, and his death was not unexpected. Dr. Youlin was esteemed as a man of high character, and he enjoyed an extended practice.

—A dispatch from Paris announces the death, on October 30th, of Dr. Jean Baptiste Bouilland. Few physicians have occupied a more prominent position for the last half century than this Nestor of the French profession. We shall recur to the details of his career in another notice.

—Dr. Abraham Crispell, a well-known physician, in practice at Rondout, N. Y., for forty years, died November 5th, at the age of 59 years.

—Dr. J. W. Jamison, of Meneamin, Iowa, died from accidental poisoning, on October 27.

QUERIES AND REPLIES.

Dr. J. L., of Iowa.—The article on hemorrhagic diathesis in the REPORTER, vol. xli, p. 251, was incomplete, through the omission o a sentence. You will find the omission rectified in the same volume, p. 308, under Queries and Replies. The salt referred to is chlorate of potash.

Dr. J. W. H., of Ills.—We can supply binders for the REPORTER, of two kinds, both stamped with its name:

1st. Ordinary cloth cases, to be applied to completed volumes, by a bookbinder, twenty-five cents each.

2d. Russell's "Common Sense Binder," for filing each number as it appears, seventy-five cents each. We recommend the latter as very satisfactory. Remit with order, and they will be mailed you postage paid.

Dr. S. T., of N. Y.—We rarely or never care to publish poetical effusions in this Journal. On that general ground, therefore, we must decline yours.

Dr. G. H. B., of Me.—We cannot return MSS. which have been used. We return others if sufficient stamps are sent for prepayment.

MARRIAGES.

HAIGHT—ANNES.—On Wednesday, October 12th, 1881, at the residence of the bride's parents, by the Rev. George Dickinson, Alfred M. Haight, M.D., and Belle C., daughter of Charles Annes, Esq., all of Woodbridge, N. J.

JENKINS—HOWARD.—In Thetford Centre, Vt., September 29th, by the Rev. T. P. Frost, Hugh Jenkins, M.D., of Preston, Ala., and Mary Lena Howard, of Thetford Centre, Vt.

JEWETT—STUART.—On October 6th, 1881, at the First Reformed Presbyterian church, Philadelphia, by the Rev. Dr. John Hall, William Kennon Jewett, and Patty K., youngest daughter of George H. Stuart, Esq.

KIRKPATRICK—APPLETON.—On October 22d, 1881, in Haddonfield, N. J. Baptist church, by the Rev. R. F. Young, assisted by the Rev. Mr. Baldwin Mr. M. Baldwin Kirkpatrick, M.D., of Philadelphia "Medical Mission," and Miss Hannah, eldest daughter of Samuel Appleton, Esq., of Haddonfield, N. J.

DEATHS.

BLAKE.—Dr. John D. Blake, an old and prominent citizen of Washington, died October 26th, 1881, of heart disease.

SCUDDER.—In Trenton, N.J., on Monday morning, October 17th, 1881, Dr. John W. Scudder, in the sixty-eighth year of his age.

WRIGHT.—At Seabright, N. J., on Wednesday, October 12th, 1881, after a brief illness, Harriet Elizabeth, wife of Charles Wright, M.D., of this city.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

NEURITIS AND PERI-NEURITIS OF THE BRACHIAL PLEXUS.

A Clinical Lecture delivered at the Hospital of the University of Pennsylvania, Sept. 13th, 1881.

BY CHARLES K. MILLS, M.D.,

Lecturer on Electro-Therapeutics in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Gentlemen:—I bring before you to-day a very interesting case. He gives us the following history: He is 23 years old. A seaman by occupation. He was healthy up to the sixth day of January last. At that time, while on board his vessel, in a storm, he was struck on the left side by what he calls a "heavy sea." This threw him violently across the vessel and over the cabin. He was picked up unconscious and remained so for fifteen or twenty minutes. His head was cut by the fall. When he came to, he had pains in his arm, his back was "all gone," and he could not move his head. His bladder and rectum were not affected. His legs were all right. For two or three days after the injury he had fever and was delirious. He remained in bed for two weeks, but it was three weeks before he reached shore.

Q. "Have you pain in the arm now?"

A. "I had pain in the arm but that is pretty well. It hurts me now when I touch it."

He means by that, gentlemen, that there is hyperæsthesia.

Q. "When did it begin to be painful to the touch."

A. "Only last week. There was pain in the arm for the last six months, but that is pretty well."

As he sits here, with his arm and trunk exposed, his condition is so manifest that you can see at a glance what is the matter. We see that the shoulder muscles, the scapular muscles of the left arm, and the posterior and lateral muscles of the left side of the trunk, are markedly wasted. Then passing down the left arm, you notice that there has been extreme wasting of the muscles of the entire arm from the deltoid to the interossei, and even the finger muscles themselves. In other words, you have a condition of very advanced atrophy, involving the entire left arm and the corresponding half of the trunk.

In examining the case a little further, we shall find some other symptoms, which are not very common. Thus, in connection with this atrophy there is in the upper part of the limb manifest hyperæsthesia. As I press in various positions around the joint, the man winces. Now, I shall begin here, over the region of the brachial plexus, and pass upward and downward, and determine how far the hyperæsthesia extends. Just above the middle of the clavicle it is very distinct. Passing down the chest, I find that since the last examination there has been considerable improvement, under a treatment of which I shall speak in a few minutes. He winces very markedly when pressure is made in this region below the spine of the scapula. Now, passing downward we find the same condition until we reach the elbow. Here, we find a very different condition. He does not feel at all—anæsthesia.

We then have the following condition: paralysis and atrophy with hyperæsthesia in the uppe

portion and corresponding side of the trunk, and analgesia and anæsthesia in the lower portion of the arm.

What is in all probability the nature of this case? In arriving at the diagnosis of this case, we shall have to consider three, or perhaps, four possibilities.

Have we a cerebral lesion? Have we a spinal lesion? Have we a peripheral lesion, or have we a peripheral with a spinal or cerebral lesion?

Before going further, let me say that there is no previous history of disease of any kind. Nothing to lead us to suppose it to be a case of some form of adult spinal paralysis.

In the first place, is there a cerebral lesion here? There are some things which render this view probable. He became unconscious at the time of the accident. He remained unconscious for some time. He suffered severely for several days, had fever and was delirious. But there are several circumstances which I think point to the fact that this cannot be purely a cerebral lesion, and that if it is cerebral, there is something more. If it were a cerebral lesion, how could we account for the extreme hyperæsthesia in one portion, and anæsthesia in another portion of the limb. If he was suffering from palsy, due to hemorrhage or an inflammatory condition of the brain in the region of the arm centres, he might have paralysis almost equal to that which is present, but there would be no reason for this hyperæsthesia and anæsthesia. A cerebral trouble which would give rise to the condition that we have here would have to be one occurring in the so-called arms centres, which occupy the middle Orlandic region of the brain, or a lesion of the striate body or internal capsule; but when you have paralysis of one limb, due to cerebral lesion, you do not have atrophy, as you have here. Almost every one of you have seen these cases of monoplegia or partial hemiplegia, and you have noticed that the contour of the limb was well preserved. We have, then, several reasons against a cerebral lesion.

Could it be spinal? Several things point to a spinal lesion. We have here atrophy of the limb with paralysis. Both of these might result from a lesion of the anterior horns of the cord. But against this view we have again the existence of decided hyperæsthesia and anæsthesia. There is also another point against the supposition that the lesion is spinal. If there is a destructive lesion of the anterior horns of the cord, sufficient to cause atrophy and paralysis as great as is here present, there will be a certain amount of ischæmia and coldness present. The limb will be pale. This man's arm is not cold, and there is no ischæmia. There is, perhaps, a little change in the color, due to passive congestion from gravity.

I am, therefore, reduced to one other conclusion, and that is, that we have to deal with a peripheral lesion. We have here, I believe, a case of neuritis involving, primarily, the brachial plexus, resulting from injuries received by being hit and knocked down by a heavy sea. There may have also been torsion, as well as the direct injury.

I think that everything points to this, as the correct conclusion, that we have neuritis (and under this head, I also include peri-neuritis) of the brachial plexus accompanied by ascending and descending neuritis. We can account for every manifestation of the case on this supposition.

How do we account for the fact that anæsthesia exists below, while above we have hyperæsthesia? I account for it in this way. The nerve and nerve sheaths which are most inflamed are the cords of the brachial plexus, this inflammation extending a certain distance in both directions. When a nerve is in a state of subacute or chronic inflammation it is a bad conductor of impressions. The inflammation at the very first, and when of the mildest character, may cause the nerve to transmit impressions more rapidly, but when the neuritis has gone as far as it has in this case, we have atrophy of the nerve from pressure and from degeneration, hence impressions cannot be conveyed from the parts below the seat of inflammation.

There is one point which I overlooked, when speaking of the diagnosis, that is, the response of the muscles to electricity. There has been a want of response equivalent to the amount of atrophy present.

This kind of a case is very interesting and practically important. These are the cases which, if taken in time, can sometimes be cured. This man may, possibly, be much improved, but the disease has advanced so far that his chances are not as good as they would have been some months ago. If we had such atrophy, with hyperæsthesia or without, due to cerebral trouble, the case would be entirely hopeless, as far as restoration of the arm is concerned. In neuritis, instead of the case being utterly hopeless, persis e ice in proper treatment may accomplish a great deal.

Now, as to the treatment. Immediately after the injury I think that I should have employed local blood letting. He came to the hospital two weeks ago. I then ordered a large blister over the region where the hyperæsthesia was most marked. He has had two blisters, and they have

helped him considerably. If I had seen him at first, I should have given him small doses of calomel, with rhubarb or jalap, more for its antiphlogistic than for its specific effect. We have now to do with a more or less chronic neuritis. For that I should advise bichloride of mercury, in small doses, and the use by inunction of a remedy, the formula for which we have in the pharmacopœia of the house. It is an ointment consisting of about equal parts of mercurial, iodine and belladonna ointments. This should be plentifully spread over the whole of this region. It acts both as a counter-irritant and as a stimulant to absorption. A year or two ago we had a very curious experience while using this ointment on a case very similar to the present one. The man had neuritis resulting from an injury from machinery. He was ordered the bichloride of mercury internally, and the use of this ointment. After a short time all pain suddenly disappeared, and he began to use the arm. The pain remained away. Finally, he had a relapse, which, I believe, was due to a relapse of the neuritis itself.

The whole limb might be painted with iodine. A good local treatment, is to make a paste with iodoform and collodion in certain proportions, and paint the limb. By any of these methods of local treatment you will get good results.

We have another indication to meet, that is, the condition of the muscles. When the neuritis becomes absolutely chronic, and when we have to deal with the results of neuritis rather than the disease itself, we shall put him on that remedy which has been called by Erb, "a sovereign remedy," that is, the continuous current of electricity.

The man shall be put on the treatment I have described. The use of blisters, the application of the ointment of mercury, iodine, and belladonna, and the use of the continuous current. When the acute symptoms have subsided, we shall resort to the intercepted galvanic or faradaic current, with the hope of restoring the muscles to better condition.

Antidote to the Poison of the Bothrops.

At the Paris Academy of Sciences recently, M. de Lacerda states that he has found an antidote to the virus of the Bothrops, in permanganate of potash. A solution of this salt injected hypodermically, after the venom of the serpent had been introduced beneath the skin, prevented the appearance of any local disturbance where the virus had been injected. When the antidote was not used, swellings and abscesses always occurred. The same thing was observed when poison and antidote were injected into the veins.

Communications.

INSANITY IN RELATION TO LAW, WITH SOME REFLECTIONS ON THE CASE OF GUITEAU.*

BY C. H. HUGHES, M D.,

Late Superintendent Missouri State Lunatic Asylum, Editor *Alienist and Neurologist, etc.*

Long before the real nature of insanity was understood, statutes were framed, defining the legal relations of the insane and fixing in their behalf exemptions from the ordinary penalties of violated law. As might have been expected from the vague conceptions of the real nature of mental disorder, it having been so long and early regarded as something that had fallen upon man from without, as the result of wrathful deities offended, or satanic visitations, instead of the natural consequences of a diseased organism, the municipal laws so framed were often lacking in adequate sympathy for those afflicted creatures, and inadequate to their just protection. Statutes thus early framed and legal precedents thus early established, independent of medical opinion, and in fact long before medical men had themselves cast off the shackles of popular prejudice, and acquired accurate notions respecting this disorder, have been slow to change in conformity to the corrected and just views of enlightened science; for law is remarkably conservative in its instincts, blindly reverencing the mouldy precedents of the past and jealously guarding her sacred precincts against the profane presence of audacious science that dares to dispute the rulings of courts on matters of disease. This conservatism has displayed itself at times, in unwarranted prejudice against our humane and progressive profession, causing eminent jurists, forgetful of the prorogatives of science and the proprieties of the court room, to tell distinguished physicians that they had better be at home with their patients than away from them to instruct courts and juries in matters of disease, as if such vocation were the province (much as physicians really dislike the duty) of any other than the physician. That time, however, is past, and no English Judge in our day would have the effrontery to adopt this discourteous precedent and apply it to the medical expert, for, though law has persistently resisted the enroachments of enlightened mental science, it has now and then, here and there, reluctantly yielded some of its ground, until, comparing the present with the remote past, the thrust of the scalpel of scientific medical truth

* Read before the Tri-States Medical Association, at St. Louis, Oct. 27th, 1881.

has effectually penetrated the judicial ermine and touched the heart of law, not, however, until after much innocent blood had been shed in its name.

In the legal mind theoretical conceptions of what mental conditions pathological states ought to produce, have been permitted to supplement and supplant observed facts in mental pathology, and judicial decisions most absurd have, in consequence, in the light of clinical observation, been promulgated, and continue still to deface the records of the judiciary.

However strenuously the latter may strive at and assert a consistent harmony with past precedents, its decisions have not been consistent, and can never be so until, in questions of mental derangement, they are made to harmonize with the facts of disease, and these facts must come from those alone who are competent, from daily habits of observation and thought, to enlighten them, from those to whom the thermometer and sphygmograph, the lens and test-tube, crucible and dissecting knife, are familiar aids to observation and reflection, and in whose minds mere theories of the possible, habitually yield to demonstrable facts—the skeptically-minded physician, whose constant habit it is to search for physiological and pathological laws more unvarying than dicta of courts, and when he finds them, to willingly surrender his preconceptions to the higher statutes of unerring nature.

Pursuing a different method, while all the time asserting their consistency, courts have "successively abandoned or resumed one principle after another, either with the strangest disregard of consistency," says the distinguished Dr. Ray, or "the most extraordinary ignorance of previous decisions;" and he makes a scathing arraignment of the English judiciary for its inconsistent attitude, in different historic trials, with reference to the knowledge of right and wrong test, in which the plea of insanity was interposed to exempt from crime. Thus in the famous trial of Hadfield, for shooting at the king in Drury Lane Theatre, in 1800, he says it was abandoned, but reaffirmed in that of Bellingham, in 1812, where the offence was committed, passed upon and punished with death, the body of the condemned dissected within eight days, abandoned again in the trial of Martin in 1831, and reaffirmed in 1837!

This scathing arraignment by one of the world's most distinguished writers on the medical jurisprudence of insanity, would not have been possible had law been more becomingly modest with reference to questions medical, and more deferent toward that profession which is competent to, and should of right, enlighten law on questions of disease, whether the coarser bodily functions are alone involved by it, or the subtle operation of the mind.

"On the trial of Hadfield," says the distinguished medical author just referred to, "there occurred, for the first time in an English court, anything like a thorough and enlightened discussion of insanity as connected with crime, and the result was that a fatal blow was given to the doctrine of Lord Hale, by Mr. Erskine, who brought all the energies of his great mind to bear upon the elucidation of the subject. (Lord Hale's idea was, that all felons were under a degree of insanity, and that monomania did not excuse crime any more than a child of fourteen could be excused for treason or felony.) But even the great Erskine overthrew one legal error by another, that of delusion, a criterion of mental irresponsibility that has caused to be judicially executed, as well as saved, many a hapless victim of irresponsible disease.

Just as the legal test of responsibility still reiterated from the bench, namely, "a knowledge of right and wrong," if insisted on, would have convicted Hadfield, subsequently Oxford, and still later others, for shooting at the British Sovereign, Lawrence for attempting the life of President Jackson, poor Freeman, of Pohasset, for the murder of his child; so the other criteria of criminal irresponsibility, when exclusively demanded as the only evidences of mental disorder, have sent their scores of innocent victims to stake, guillotine or gallows. The past history of the jurisprudence of insanity, until a comparatively recent date, has been a record of justice and crime against humanity, about equally apportioned; and even now, prejudice against an often just but sometimes wrongly used plea, and predilection for methods of investigating mental phenomena, and determining responsibility not warranted by medical experience bias judgments, color instructions of courts and shape methods of legal procedure to the hurt of the weak and irresponsible, whom it is the bounden duty of the State to protect. Something of that feeling which prompted Lord Brougham to believe that the fear of punishment would deter from crime those persons of deranged intellect who hover around the courts in search of redress for real or fancied wrongs, seems yet to influence some of the learned judges of our time; for there are cranks in our own day, as there were then, who hover on the border line of insanity, and finally pass over into positive mental disease; and this

disposition to punish in order to prevent morbid eccentricity, passes in many instances to the absurd extent of seeking to restrain the lunatic by legal penalty; though it must be conceded that some insane persons are, in a limited degree, sometimes amenable to deterrant influences, like some of the inmates of asylums; but in general, punishment is futile to restrain the erratic displays of unstable mental organisms, for disease and not reason is the propelling influence.

There are, however, methods humane, and they ought to be made lawful, by which insanity may be abridged, and the great horde of neuropaths that follow like sick and wounded stragglers of an army in the march of civilization reduced in number: methods that would leave no stain of blood on the judiciary, no foul blot of murder on the State's escutcheon; but to learn them, law must submit to be taught by our science.

The neuropathic diathesis, the insane constitution, that breeds its like and burdens the State with hereditary imbecility, idiocy, insanity, deafmutism, and the lesser degrees of mental defects, must be made the subject of statutory enactment and enforced law; sentimentality must yield to fact; the teachings of nature must be decided and as sternly enforced as her own unerring edicts are. Why should confirmed drunkards be permitted to beget a race of imbeciles, epileptics, idiots or criminals? Why should the life-long criminal and the pauper be allowed to go on reproducing his defective kind, the lunatic likewise, and all the mentally maimed of whatever degree, especially when by forfeiture of liberty they fall under proper custody of the law; and why should generation after generation of these miserables be allowed to be brought into being to become either burdens of the State or victims of its misdirected vengeance, when prevention is possible, and better for the State, and only justice to the helpless and prematurely doomed to an unchosen existence worse than death? If municipalities may lawfully quarantine yellow fever and cholera, why may not, and why ought not this greater destructive agency than plague or pestilence, which never ceases its ravages—the hereditary descent of the organically vicious and defective—be stopped by law. No pestilence that ever walked in darkness or destruction that has wasted at noonday has done greater harm to mankind than the silent, ever active destructive power of hereditary degeneracy of brain and mind. Instead of visiting punishment on the heads of these weakened victims of entailed disease, let law go to the *fons et origo*, and stop this vicious progeny from being thrown upon a world in which they are unfitted to live.

When law shall interdict the marriage of these defectives, and by other means prevent their propagation; when the race of each is run the career of his kind is ended, and society is no longer annoyed, perplexed and burdened. For certain of the criminal class, and for certain defectives to whom liberty might be given, surgery suggests a plan less radical than that of Lycurgus, and more effective, and more appalling to real crime than guillotine or halter; equally conservative of mental and moral health, and in some instances absolutely curative of the individual. If a life is forfeit and only blood will suffice, let it be thus compromised.

To avoid the errors into which courts have fallen with reference to the question of mental derangement, physicians should seek, in every case of suspected or pleaded insanity, for disease of brain, impairing the mind; for, as in a healthy brain, the disturbed brain circulation, anomalous pulse, disordered heart, the persistent insomnia, sluggish bowels, altered renal and other secretions, voracious or variable appetite, gastric, hepatic and other conditions, ophthalmoscopic and æsthesiometric revelations, the changed pupil, facial expression, temperature, voice, and skin in certain cases, the altered demeanor, intellectual and moral, the unnatural actions explainable only by disease or simulation of disease of brain and mind are to be sought for and considered—for even the courts concede that mental disorder is the result of disease. Singularities of conduct, or even hallucination, illusion or delusion, do not necessarily constitute insanity; they are not insanity *per se*.

That patient and laborious search which ought in every case to be made where insanity is pleaded or suspected, if it fail to reveal disease, will often bring to light rational, though base and sometimes unsuspected and startling, motives, sufficient to satisfactorily explain the most horrible violations of Divine and human law. Every human fiend is not insane, though insanity would be a most charitable mantle to cast over all human depravity, if we could honestly thus shield the wickedness, as we may often so shield the weaknesses of mankind. So that while many singular, immoral, unjust, and unlawful actions are the results of disease, and only thus explainable in certain persons, similar conduct in others, apparently the product of insanity, when hidden motives are brought to light, appear quite rational and absolutely explainable

upon no other hypothesis than that of entire mental soundness, instigated and impelled by improper considerations, but not resistless disease.

The subject is clear enough if disease be readily apparent, but extremely difficult sometimes when disease is obscure, or has only been active at some remote period in the individual's life; in such cases, our search must be the more patient, deep and thorough.

And now that a stricken people have partly recovered from the fatal blow that took away their loved and honored President, and are still asking why was so good and great a man thus destroyed; what shall we say of the miserable, cringing assassin at Washington, a few months ago so badly bold and desperate? Was it disease that fired the fatal shot, or was it foul volition prompted by vengeful motive, springing from unrequited claims for undeserved favor, and only this alone? Was the fatal heritage of a faulty organism sufficiently strong and active in him to make the deed one of morbid impulse or disease-fettered reason? Was a brain unstable, bequeathed by a diseased ancestry, coupled with subsequently engrafted disease, at fault, or was it a clear-headed, sound-minded, depraved villain killing for a grievance and for a coveted but ignoble and vainly egotistical notoriety, as Brutus killed Cæsar, relying, in the event of failure of his previously planned escape, upon the history of insanity in his family for presumptive extenuation of his prospective crime? Is there enough of the insane diathesis in this man's organism to make his insanity *prima facia*? Has the evil heritage descended especially upon him more than upon the acknowledged sane members of his family, or is he intelligent enough to take advantage of his family history for simulation? Who of his family are or were insane, other than his uncle and two cousins, as reported? What are the evidences of insanity in him? Was he ever sick, and when, and where, and how? How has he acted, and when, and where, and how? What improprieties of speech have escaped him, and for what cause; and what conduct has he displayed that only disease can explain, or that mainly point to disease as their cause, are questions to be answered before we can safely decide upon his mental status? Was his conduct while connected with the Oneida Community the result of disease, or of pure cussedness not to be so charitably extenuated? Was he carefully educated, intellectually and morally, and has his character changed from disease or choice? Were the egoism and erratic immorality of his life the gradually reared structures of successive volitions, or the product of disease? Was it a delusion, or pure self-conceit and purpose of deceit, that led him to style himself *Honorable*, as men often do, without the shadow of title, assume fictitious civic and military rank? Was there a lurking delusion or a vain conceit, with purpose of notoriety and gain, that caused him to announce himself as a great Chicago lawyer (or is the lunacy of imagined greatness a common trait in Chicago people)? Was the scheme of this impecunious man to buy out the Chicago *Tribune* a delusion, or a confidence venture? Was it a delusion to proclaim that the Bible gave evidence that Christ reappeared on earth in the year A.D. 70, to deliver political speeches to colored audiences, to evade his debts, abuse his wife, confess without shame, in open court, the crime of crimes against her? was it a delusion in him, as a lawyer, to ply the disreputable art of a shyster; and if so, how many lunatics have we that hang about the Four Courts of St. Louis?

Was it a delusion or self-conceit in him to apply for a foreign appointment, to take the life of the President. proclaiming himself a Stalwart of Stalwarts, for no other offence than that he had been refused an official position for which he was unfit, while professing all the while to be a follower of Him of Nazareth, who commanded that "whatsoever ye would that men should do unto you do ye even so to them?" Is it insanity to display no remorse at the deed, yet to crouch in deadly fear when a near speeding bullet imperils his own life?

Was this unstable and brutal character, consistent only in supreme selfishness, the outcome of a cultivated self-feeling, built up step by step in his life by voluntary effort, or was it a supremely morbid and irrepressible egoism, the sole product of resistless disease, is the question, under the surface of his acts, to be determined. The history of a life is to be inquired into; a biography of disease or folly is to be recorded in the court; and when fact is sifted from mere statement, and sworn testimony takes the place of rumor, we may see more clearly. When all the facts are in, the true psychological expert will calmly, dispassionately, cautiously form his opinion, though the newspaper expert may have long anticipated him with an opinion and a verdict.

There are appearances of rationality in Guiteau's crime. His disappointment and revenge, his plan of escape and precautions against mob violence, his deliberation in postponing, for proper considerations, previous determinations,

his possible though mistaken belief in the omnipotence of his wing of the party, his mistaken belief in the necessity of the President's death, and the temper of the people—these are also reasonable suspicions of his insanity, if he had an insane father, as reported; if he has been positively insane himself formerly; if the deed was planned and executed under a delusion, developed by disease, that it was his duty to take away the life of the great and good President; if he was sleepless and ill-fed, and in bad health, having delusions on various subjects (as have been reported); if most of his family are pervaded with positive insanity or the neuropathic diathesis and other conditions, and facts already indicated. So that the case presents a psychological problem, not soluble at a glance. How to get the precise pound of flesh and be just, though it be justly due, is often difficult; but the true psychiatric expert, like the just judge, will grant nor ask no more.

Hospital Reports.

UNIVERSITY HOSPITAL.

Clinic of Dr. Louis A. Duhring, Professor of Diseases of the Skin. Sept. 23, 1881.

REPORTED BY HENRY WILE.

Epithelioma of the Lip.

A man about fifty years old presents himself with a circumscribed ulcer upon the left side of his lower lip, encroaching somewhat upon the mucous membrane of the mouth. The inner part of the ulcer is covered with a yellowish secretion, while the outer part, or that exposed to the air, is covered with a brownish crust. The patient states that he has had this abrasion for a period of two years. He had been accustomed to smoke a clay pipe, allowing the pipe to rest especially upon the left side. The habitual use of the pipe had set up an irritation of the mucous membrane of the lip, which, being allowed to continue, in this case, developed into the condition here presented. The lesion being exposed to the air, soon becomes covered with a crust, and in order to arrive at a correct diagnosis, it is always necessary to remove the crust so as to be able to see the true nature of the lesion.

The sebaceous glands are greatly enlarged, they becoming involved very early, or primarily, in the development of this disease.

The diagnosis is generally easy, if we can get at the history. It may, however, be confounded with chancre, yet the indurated base of the latter, together with rapid development, and the absence of pain, is generally enough to distinguish it from epithelioma.

The treatment in this case is obvious: the growth must be removed; the sooner the better. There are several ways to effect its removal—by the knife, actual cautery, or caustic. In the present case, the mucous membrane of the mouth being encroached upon, it is advisable to use the knife.

Eczema Rubrum, with Acute Dermatitis.

A lady with a diseased condition of the skin on the dorsum of the right foot. The appearance is somewhat misleading, for the true nature of the disease is nearly covered up by lesions which, from the fact that they are acute, are more likely to attract one's attention. We see here an acute pustular and vesicular inflammation set up on a surface already diseased. Remedies have been applied that were of too stimulating a character, and their persistent use has set up a simple dermatitis. The original disease is eczema rubrum, of long standing. It will be necessary, in the treatment of this case, first, to allay the inflammatory symptoms. This will be done by means of any soothing dressing, such as a lotion of lead water. This will, in a few days, bring the case where it was before it was maltreated. Then we will have a case of simple eczema rubrum, which will be treated with black wash and oxide of zinc ointment, and later with calomel ointment.

Epithelioma of the Nose.

A lady about fifty-five years old, with a small tubercle upon the side of her nose. She states that it made its appearance about eight or nine weeks ago. It is about the size of a split pea, having an open surface with a broken down centre. It is rapidly getting larger. This is a form of epithelioma in an early stage. It must be removed at once, and being superficial, will be touched with caustic. An operation of this kind must be thoroughly performed; especial care must be taken to destroy the border, or a relapse is almost sure to follow. Often, in spite of all care, the disease will recur, and in the end destroy the patient. The wound will be dressed with diachylon ointment, the dressing to be changed twice daily. Three weeks will probably be occupied in recovery.

Tubercular Syphiloderm.

This man, about forty years of age, presents a marked and extensive eruption on the upper lip. There is a great deal of induration, which indicates that the lip is the seat of an extensive cell infiltration. In many places pustules may be seen surrounding the hair follicles. There are also excoriations, fissures, scanty yellowish crusts, and here and there some brownish crusts. These lesions run down the angle of the mouth, extending even upon the chin. On the right side of the upper lip, near the angle of the mouth, we notice an indurated tubercle. Almost the entire surface of the lip is denuded of its hair.

From appearances we should judge that the condition was chronic, and the patient, indeed, states that he has had the disease a little over a year, it being better and worse from time to time.

The disease, situated as it is in this case, may be confounded with tinea sycosis or with sycosis non-parasitica. Therefore a history, together with the mode of development of the disease, is important. The small tubercle noted above is in no way pathognomonic of the tubercular

syphiloderm, as the tubercular formation is also characteristic of tinea sycosis; and, more rarely, of sycosis non-parasitica. The treatment of the tubercular syphiloderm is most gratifying, and in two or three months this patient will have a sound, healthy lip. His treatment will consist of the following:—

℞. Biniodide of mercury, gr. ss.
Iodide of potassium, grs. ij or iij.
Wine of iron, q.s. M.

The dose is to be increased as may be necessary. Locally, a mild mercurial ointment, as fifteen or twenty grains of white precipitate to the ounce, may be used.

Lupus Erythematosus.

A young lady about nineteen years old presents lesions on the cheek, nose, forehead, and scalp, of a very striking character.

We will first get a brief history of the case, as that is of some importance in the matter of diagnosis. On questioning the patient, we get the following points:—

The disease made its appearance about three years ago, in the shape of two small red spots, one on each cheek. When they had attained the size of a pea, their growth was apparently arrested. This quiescent state continued for six months, after which period they increased in size from time to time, oftentimes remaining stationary, then again breaking out afresh, and more than doubling in size.

On the right cheek the patch has increased more rapidly than that on the left cheek, and now is as large in area as the palm of a hand.

The subjective symptoms are at times marked and annoying; among these, burning and itching are the most prominent, the burning being sometimes severe.

The patch on the right cheek is the largest, and may be briefly described, as follows: It is irregular in form, sharply defined, slightly, if at all, raised from the surface, and of a violaceous or raspberry color. It presents a somewhat scaly appearance, especially in the older portions. In the centre of the older portion there is a depression, which is covered with scales that are so adherent as to be picked off with difficulty.

The patch on the nose is irregular in outline and also is covered with scales. The patch on the left cheek is similar in appearance to that on the right, but is partially covered with sebaceous matter. On the forehead near the scalp the lesions are somewhat paler, and on the scalp they are covered with sebaceous crusts. The sebaceous follicles are not involved so markedly in this case as they generally are.

We also notice on the head several deep scars. They are in this case the natural termination of the diseased process, and not the result of the ruthless application of caustics, as is sometimes the case.

The scars, however, are unusually deep seated. There has been no ulceration, erythematosus being one of the few diseases that leaves scars without being preceded by ulcerations.

The general appearance of the lesions indicates that the disease is spreading, and if not soon brought under treatment will create greater ravages. In the neighborhood of the principal lesions, new patches can be seen making their appearance, and this fact shows that the process is active.

Lupus erythematosus is a tolerably common disease, as is also lupus vulgaris. Cases of both diseases come before us here, from time to time; but the more frequent of the two is lupus erythematosus. They are distinct diseases, each having its course of development, pathology, and treatment.

The patient has used much medicine, both local and internal, since the disease made its appearance, but evidently without good results. She has used iodized starch, a remedy made according to a given formula, and highly recommended by McCall Anderson. It is often taken with advantage, yet the patient used it from July to September, taking a teaspoonful three times a day, without any apparent benefit. On the contrary it seemed to disturb her digestion.

Locally, many applications have been made. One pint of soap (two parts sapo viridis, one part alcohol) has been used alone, and also followed by tarry ointment, but without benefit.

In the treatment of this disease, it must be remembered, that all cases cannot be treated alike; there is no one line of treatment which can be followed, as there are different types of the disease, each calling for somewhat different treatment, the one stimulating, the other soothing, etc. The former is usually called for.

As the disease in this case seems to be very active and inflammatory, we will first direct our attention to the recent lesions, using the following application, which sometimes has answered well in my hands:—

℞. Sulphur, ℥j
Alcoholis, f℥ iiiss
Etheris, f℥ iv.

Sig. Apply as a lotion twice daily. Shake before using.

The general health of the patient is good. There is slight constipation, and to secure a movement of the bowels once in twenty-four hours, we will order a saline draught daily before breakfast. A mixture such as the following may be recommended:—

℞. Magnes. sulphat., ℥ iss
Sodii sulphat., ℥ iv
Potassii bitart., ℥ iij
Aquæ, f℥ vj. M.

Sig.—One tablespoonful in a gobletful of water.

Left to itself, the disease will, in most cases, continue for a lifetime, making new invasions into sound tissue, and producing disfigurement. It is very obstinate, and is difficult to cure. The prognosis, therefore, should always be guarded, as it requires months or years to effect a cure. Some cases resist even the best directed treatment.

Tinea Versicolor.

A young man, about twenty-two years of age. The disease is situated on the back, from the neck to the lumbar region, and on the front of the body from the clavicle to the umbilicus. It is scattered over the regions indicated, in the form of yellowish, irregularly shaped areas.

These patches, especially those of recent origin, have a sharply defined border, and present a striking contrast when compared with the healthy skin. There is scarcely any elevation, but the patches are covered with the peculiarly charac teristic furfuraceous scaling, which can easily be scraped off with the finger nail.

The cause of the disease is the presence of a vegetable parasite, called microsporon furfur, which can readily be detected in the scales by means of the microscope. The parasite exists in the state of mycelium and spores, and is almost exclusively confined to the upper layer of the epidermis.

The disease is easily recognized, yet it may be overlooked; and I have seen it often absurdly mistaken and treated for jaundice, on account of the yellow discoloration; indeed, it was at one time called liver-spot disease, the patches being known as liver spots. The disease is thoroughly curable, and the treatment is very simple; all that is required is extreme cleanliness, and the assiduous use of some parasiticide.

I think that the best results are obtained with sulphurous acid; the patient will, therefore, be directed to use a lotion composed of one part of sulphurous acid diluted with two or four parts of water, after having taken a bath and rubbing the affected parts well with sapo viridis. The parts should be well washed before each application, and the lotion should be applied night and morning.

Corrosive sublimate in form of lotion, one or two grains to the ounce, may also be used with good effect.

Tincture of veratrum viride is likewise good. Unless the treatment is thorough relapses are very apt to occur.

Medical Societies.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

Reported for the Med. and Surg. Reporter.

Wound of the Finger.

Dr. Leonard. I was called to see a man who five or six days before had struck another man in the mouth with his fist. The teeth had made an incision over the joint, the wound was full of fungous granulations, the whole hand was enlarged, and cellulitis extended up the arm.

Placenta Prævia.

Dr. Leonard. I was called to see a case of this trouble. One third of the placenta was over the uterine mouth; shoulder presented; waters had been discharged six or seven hours before; hemorrhage profuse. I turned and delivered without much trouble.

Incontinence of Urine.

Dr. Scarff. A boy, ten years old, had been under treatment for four years. His health was good, except this continued incontinence. Every remedy was used, including electricity, without effect. His penis was small and the prepuce long and flabby, and I resolved to try circumcision, which operation was performed four weeks ago, one inch being removed. The wound healed nicely, and while the boy remained in bed there was no trouble, but when he got up there was some dribbling, which gradually became less, and now he only passes water four or five times a day, and seems to be perfectly relieved.

Heart Clot.

Dr. Branham. A woman, twenty five years old, died thirteen hours after premature labor. She was struck by her husband on the abdomen, which gave her much pain and produced a hemorrhage lasting about two weeks; recovered in a month. In a month from that time she was prematurely delivered; got up to pass water, fell back unconscious, and died in a short time. An ante-mortem clot entirely filled the right auricle.

Cleft Palate.

Dr. Michael. The cleft extended only through the velum; separation not over three-quarters of an inch; thought it a very favorable case for operation. The operation was performed one week ago yesterday, and there seemed to be no strain whatever on the sutures, but on the fourth day one suture had cut through, and by the fifth day all had cut through and the case was in the same condition as before operation, less the amount of tissue removed. As soon as practicable, another attempt will be made. Some of these cases are very obstinate. In one, I operated four times, before I succeeded in getting union, and then had to use nitric acid.

Diabetes.

Dr. Friedenwald. A man presented himself for life insurance examination, and all was favorable until the kidneys were examined, when quite an appreciable quantity of sugar was found in the urine. Subsequent examination showed sugar still present. He then said he had felt a little unwell for some days, and was treated by his physician for biliousness; had thirst, and had to get up once in the night to urinate. I gave him carbolic acid, gtt. j, four times a day, and he was much improved; he has used it for two weeks, with restricted animal diet, and the sugar has disappeared, whether permanently or not, I cannot say. I have used this treatment in two other cases, one of which was cured, and one much relieved.

Dr. Lynch. Drs. Smith and Bridges use sulphide of calcium in these cases. They give grs. ij, every four hours. It will diminish the quantity of urine excreted, and is, therefore, useful in diabetes insipidus. I think I cured a case about two years ago with this remedy.

Abscess of the Liver.

Dr. Rohe. A woman aged forty three, mother of ten children, was a patient at the Woman's Hospital. She had pneumonia, rose up in bed to pass fæces, gave a gasp and was dead. Post-mortem examination was made next day. The lower lobes of both lungs engorged; clots in both ventricles; fibrinous clot on mitral valves, and ante-mortem clot in the left ventricle. She died from heart failure. Evidences of old pleurisy on both sides; adhesion so strong on the right side that they could not be torn by the hands. The liver was enlarged and the lower border of right

lobe adhered to the stomach, pancreas, and duodenum. Ten calculi were found in the gall bladder. On examination of the liver, an abscess was found at lower border of right lobe, formed by the liver superiorly; gall bladder in front, and stomach, duodenum and colon below. It held about four ounces of not offensive pus. The walls were quite thick, some parts about one line in thickness, showing the abscess had been some time in forming. No pain was complained of in the hepatic region; none of the symptoms described by Hammond, as indicating hyperæmia of the brain; no symptoms for the last three months, pointing to liver trouble; no evidences of inflammation of the intestines; no hemorrhoids; no rectal fistula. There was a vesico-vaginal fistula of three years standing. The abscess may have orginated from traumatism, of which there was no history, or f om gall stones.

Dr. Arnold. Frerichs relates a number of cases of these capsular abscesses from encysted gall stones.

PROCEEDINGS OF THE MEDICAL SOCIETY OF HARFORD CO., MARYLAND.

The regular bi-monthly meeting of the *Medical Society of Harford County* was held at Hanna's Hotel, Bel Air, on Tuesday, September 13, 1881. The President, Dr. David Riley, was in the chair.

The secretary read a letter, which he had received from Dr. W. W. Virdin, resigning his membership in the Society, assigning as the reason for such a step the want of social harmony with one of the members.

On motion, Dr. Virdin's resignation was laid over, for action at the next meeting.

Dr. R. D. Lee, who had previously been appointed to prepare a paper on the general subject of Inflammatory Diseases, apologized for the non-performance. and asked for further time, which was granted.

Dr. W. Stump Forwood asked leave to offer the following amendment to Article IV, of the Constitution, in reference to the election of members, viz:—

"A candidate for membership must present his application in writing, signed by himself, and indorsed by two members; and the application shall be accompanied by the initiation fee—two dollars. Should he receive three-fourths of the votes of the members present, he shall be declared elected."

Dr. Forwood explained the necessity for this amendment. He said that there was, at the present time, one name upon our list of membership, which had been proposed, and successfully balloted for, at the instance of an over-zealous member, without the consent of the gentleman thus honored, and, of course, without the payment of the initiation fee, and who now asks to have his election canceled, or annulled. To provide against the recurrence of such a mortifying act in the future, it is now proposed to require by constitutional provision the candidate's written request for membership; and, as a further assurance of good faith, the accompaniment of the initiation fee.

Under the rule the amendment was laid over for action at the next meeting.

Dr. Forwood also offered the following "standing resolution:"—

"All papers read before this Society shall be regarded as its property; and shall immediately be placed in the hands of the Secretary, to be preserved, and disposed of as the Society may direct."

The Secretary stated that, greatly to his embarrassment, in making up the records of the Society, members frequently withheld their papers, under the plea of furnishing a more legible copy, or of introducing slight verbal changes; with the promise of transmitting the amended copy to the Secretary in time to be incorporated in his report of the proceedings, and for preservation in the archives of the Society. It has been his experience, however, when the authors were thus permitted to retain their papers, to be compelled to wait an unreasonable time for their return; and, in the majority of cases, never to receive them at all. It therefore appears to be necessary, in accordance with the rules of all medical bodies, that a law be established; and that all authors, who read their papers before the Society, shall be required to have them fully completed before the reading; and that they be delivered *at once* into the hands of the Secretary, to be used in making up his report of the proceedings, and for preservation in the archives of the Society.

This resolution was also passed over to the next meeting for final action.

A few remarks were made by Dr. J. F. H. Gorsuch, and other members, upon the subject of diphtheria in its relations to croup.

Dr. Forwood called the attention of the Society to the occurrence of typhoid fever in young children. Meigs and Pepper, he remarked, in their valuable "Practical Treatise on the Diseases of Children," say:—

"It is only of late years that the frequent occurrence of typhoid fever in young children has been fully recognized by medical authors. From the date of the publication of the classical work of Louis on this disease, until the year 1839, it appears to have been the almost universal belief that it was an affection limited to adult life."

And again, in speaking of *age* in this disease, the same authors say:—

"Typhoid fever has been observed in the first year of life, but is rare under the age of two years. It is comparatively frequent between the ages of three and eight years, and it attains its maximum of frequency in childhood between the ages of eight and eleven years."

The same authors also state that *males* are more frequently attacked by the disease than females, which statement accords with the speaker's experience.

Dr. Forwood said that at the present time he has under treatment a case of typhoid fever in a white, male child, which was but twenty one months old.

At the conclusion of the business proceedings, Dr. R. D. Lee offered the following remarks and resolutions upon the recent death of a fellow-member, Dr. Joshua R. Nelson.

"The duty devolves upon me, Mr. President, to announce the death which has occurred since our last meeting; that of Dr. Joshua R. Nelson, a fellow-member of our Society.

"He practiced his profession for many years, with great skill and success, in our county, among an intelligent and discerning people, who held him professionally and socially in high esteem. Although unable for the last few years, from affliction, to participate actively in our proceedings, or in the duties of his profession, we, in common with those who for so many years had been the recipients of his professional skill and hospitality, will cherish his memory, and, behind the veil of charity, overlook the passing clouds of his life, remembering only their bright, gilded lining."

RESOLUTIONS.

"*Whereas*, It has pleased an All wise Providence to remove from our midst our fellow-member, Dr. Joshua R. Nelson, be it

Resolved, That we regret the loss of one who had labored so long, and so successfully in the profession, devoting the best years of his life to the relief of suffering humanity; and

Resolved, That we sincerely sympathize with his family and friends in their bereavement."

These resolutions were seconded by Dr. Gorsuch, and unanimously adopted.

The Society then adjourned.

W. Stump Forwood, M.D., *Secretary.*

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Stated meeting held on Friday evening, October 28th, 1881, at the house of Dr. Carl Seiler, the President, Dr. J. Solis Cohen, in the Chair.

After the reading of the minutes, Dr. Cohen related the history of the two cases examined by the members present before the meeting had been called to order. The first case, one of aphonia and dyspnœa, he stated, had taken cold about a year ago, after the disappearance of which the aphonia had persisted in spite of various remedies and applications of reagents to the throat. An examination with the laryngoscope when the man first came under his observation, a few months ago, showed the left arytenoid cartilage to be fixed in the position of abduction of the cord. There was no evidence of pressure upon the recurrent laryngeal nerve, nor did careful examination of the chest reveal the signs of a tumor which by pressure might account for the dyspnœa. The Doctor said he was therefore undecided in his diagnosis, whether the case was one of paralysis or of anchylosis of the arytenoid cartilage. The treatment, which had benefited the patient most, was the internal administration of crude petroleum in five drop doses.

Dr. Seiler said that considering the absence of all signs of pressure upon the nerves, either peripheral or central, and the rigid position of the arytenoid cartilage, together with the long duration of the aphonia, he was inclined to consider it a case of anchylosis.

Dr. Cohen then stated that the second case was one of typical laryngeal phthisis, showing the characteristic pyriform swellings of the ary-epiglottic folds, and also exhibiting papillary proliferation of the mucous membrane in the inner arytenoid space.

Dr. Seiler then said that he had lately investigated the pathological histology of intra nasal hypertrophies, and had found them to consist chiefly of true erectile tissue, in which the genous sinuses had been permanently dilated. He had found an inflammatory infiltration of considerable depth in the mucous membrane and submucous tissue. In many instances he had found that the hypertrophies had undergone either fibrous change or myxomatous degeneration. The Doctor illustrated his remarks by exhibiting sections, under the microscope, of both anterior and posterior hypertrophies.

Dr. Seiler then showed a modification, devised by him, of Jarvis' rhinoscopic mirror and tongue depressor combined. The modification consists in the addition of a ratchet to the joint, by which the mirror proper is attached to the pincette stem, and of a strong spring attached to the stem, which engages in the teeth of the ratchet, so as to hold the mirror at any desired angle to the stem, and at the same time allow the angle to be changed without removing the mirror from the stem. He stated that with this instrument rhinoscopy was very greatly facilitated.

Dr. Turnbull asked what the distortion of the posterior wall of the pharynx, which was so frequently observed, might be due to?

In answer, Dr. Seiler said that he thought it was due to inflammatory deposit of fibrous tissue in the submucous tissue, and Dr. Cohen gave as his explanation of the phenomenon, that in these cases a malformation of the vertebral column existed.

The Society then went into private session.

C. Seiler, *Sec'y.*

Editorial Department.

Periscope.

Danger Attending Hypodermic Injections of Nitrate of Silver in Nævus.

Dr. S. Hudson, of Medina, *Ohio*, reports the following case in the Ohio *Medical Journal* for July, 1881:—

About three years ago, Mr. T., a young man about twenty years of age, came to my office and showed me a small warty excrescence on the end of his left index finger. He informed me that at times it bled profusely, and desired me to take it off. Without further examination or thought, I took my hypodermic syringe with a strong solution of nitrate of silver, perhaps three or four drops, and injected it into the nævus.

In less than five minutes he was suffering the

most intense pain and agony; his hand and arm up to his elbow became white and cold; and for three hours we labored constantly, rubbing and bathing it in hot cloths. I finally succeeded in quieting him with morphine, and his father took him home. The next morning I had the mortification to see that two of his fingers were dead, the first and second, to the second joint, and I feared from his appearance that he would lose his arm if not his life. We did all we could in order to restore the warmth and color of his hand, but all to no purpose, for in less than a week the index finger (in which I inserted the solution) and the next one to it were black and dry as far up as the second joint, and his suffering for ten days was terrible. In eight weeks, a line of demarcation commenced forming, and I had the *pleasure* of amputating the poor boy's fingers just above the second joint.

In this case the solution had undoubtedly entered a small blood vessel, produced coagulation and thrombus.

Pigeon Lice Infesting the Skin of a Woman.

Dr. M. Goldsmith, of Rutland, Vt., sends the following report of a somewhat rare case, to the *Medical Record*, Oct. 29th, 1881:—

Some time last spring, a tall, gaunt, cachectic woman, with a yellowish skin, but pearly white sclerotics, came to my office, complaining of intense itching all over her body, avowing that her trouble was caused by insects crawling over her. I examined quite carefully, but could find none. She maintained, nevertheless, that she had often seen them crawling out of her skin and crawling in again.

As a number of patients happened at the time to be waiting, I told her to go home, and when any more of the vermin began to crawl over her, to catch some of them, put them in a phial, and bring them to me.

In a few days she came again, this time bringing a phial containing a number of small insects, with which, unfortunately, I was not familiar.

Moreover, she said she came prepared to show me the insects crawling out of her skin, for she had found that as soon as she began to sweat, from any cause, they would crawl out of her skin and over it, and that, if I had the time to spare, she would show the going on of the same. I told her I was ready, and forthwith she put on some wraps which she had brought with her, and drinking a bottle of hot tea, drew near the fire, and soon began to sweat.

As soon as the skin began to moisten, small black or brownish insects emerged singly, in pairs, or in triplets, from numerous points. After the sweating ceased, the insects, as the woman asserted, crowded into her skin again. *The points where they entered and emerged were the sweat-pores*, which make cosy nests for them at ordinary seasons, but were apparently not to their taste when deluged with sweat.

I sent the specimens which had been caught, to my old friend, Dr. John Le Conte, of Philadelphia, whose inquiry into such questions is a court of last resort. He answered that the insects were *pigeon or hen-lice*.

When the woman came again, she stated, on inquiry, that she had no chickens about her house, but that there were some pigeons nesting in the garret, and that she sometimes handled them and cleaned their nesting places.

The woman was finally directed to get rid of the pigeons, wash the nesting places with tar-water and a solution of corrosive sublimate (twenty grains to the bucketful). As to those upon her person, she was advised to take sweats occasionally, and, when the lice began to scamper about, to rub over her person sulphur powder, made into a sort of cream with tar water, and to boil her clothes. She has not had further trouble with the lice.

Thrombus of the Vulva.

In a communication to the *Obstetric Gazette*, for October, 1881, Dr. O. E. Herrick, of Grand Rapids, Mich., observes:—

Thrombus of the vulva may occur in one or both labia, and is perhaps, most frequently caused by the efforts of parturition; but it is liable to follow any external violence, and in persons affected with varicocele of the labia, is apt to even follow efforts at stool. Persons affected with either varicocele or hemorrhoids are especially prone to this affection. Thrombus sometimes attains immense size, and in cases of parturition sometimes produces an obstruction; it has also been mistaken for a pelvic hæmatocele. After it has attained such size as to fill the whole vagina, which one ever so small to begin with may do by extending under the mucous membrane, and as the blood continues to accumulate, it gradually extends the membrane until it fills the whole cavity of the vagina, and has been known to extend even to the uterine mucous membrane itself. The treatment as recommended by some older writers was, when it became so large as to prove an obstruction to the vagina, to make a free incision, evacuating the blood and coagula, restraining hemorrhage by pressure, with or without stuffing the wound. This kind of treatment has often proved to be very dangerous, as it is not always easy to restrain the hemorrhage either by pressure or other means; while, if the patient happens to be exsanguinous or weak, from illness or other causes, the amount of blood lost before the hemorrhage is controlled may be immediately or remotely fatal. Some one has recommended that the blood be drawn off with a hypodermic syringe or aspirator, and then to inject persulphate of iron into the sac. I have never tried this plan, but should think, perhaps, it would be a good one where the thrombus is recent and small. The plan I have always pursued where the tumor was small, was to apply cooling lotions and a compress, and if after the lapse of a few days it did not entirely disappear, and after a clot had formed, and all danger of hemorrhage had disappeared, I open with a knife, let out the contents, and again apply the compress, when they will usually entirely heal in three or four days. In case it is a large one, I treat it entirely different, for the reason that it is not practicable to apply a compress where the tumor occupies the whole or a large portion of the vagina. In such cases the best plan is to

draw off either with a trocar, or, what is better still, an aspirator, the contents of the tumor, then pack the vagina firmly with cotton saturated with glycerine, being sure to pack it full enough to act as a compress; this is easy enough after the blood is drawn off, but cannot be done before. This is the treatment for a recent case. If the tumor has existed for some time, and the blood has become coagulated firmly, and it has entirely ceased enlarging, showing that hemorrhage is stopped in the sac, then there is no danger in treating it by free incisions, and that is preëminently the thing to do before the coagulum degenerates into an abscess.

Psoriasis from Borax.

Dr. W. R. Gowers, writes to the *Lancet*, September 24th, 1881:—

Among the cutaneous eruptions which may result from the administration of drugs, psoriasis has not, I think, been hitherto included. The following facts show that an eruption of characteristic psoriasis may result from the internal administration of borax. The facts have been met with in the use of borax in the treatment of obstinate cases of epilepsy, in which bromide fails. The first instance was in the case of a man who had taken borax for nearly two years in doses of first fifteen grains, and then a scruple three times daily. An eruption of psoriasis made its appearance on his limbs and trunk, developing to a considerable extent in the course of a few weeks. Five minims of arsenical solution were added to each dose of borax, and the eruption rapidly disappeared. Shortly afterward, Dr. Spencer, of Clifton, in mentioning to me a case of epilepsy in which he had given borax with advantage, inquired if I had met with any inconvenience from its use. I told him of this case, in which I thought it possible that the psoriasis was produced by the borax, and he informed me that in his patient the same eruption had just appeared. In this case also the rash rapidly cleared away under the influence of arsenic, and a few weeks later Dr. Spencer wrote to me, "I have not the slightest doubt that the borax caused the psoriasis, or that the arsenic cured it." A third instance has lately come under my notice. The patient was a young man who had suffered from epilepsy since infancy, and was always rendered worse by bromide, so that he was brought to me with the request that bromide might on no account be given. He took borax, first fifteen grains and then a scruple three times a day, with greater benefit than had resulted from any previous treatment, and after eight months an eruption of psoriasis appeared. Arsenic was added, but the result of treatment has not yet been as certained.

The eruption in these cases occurred on the trunk, arms, and legs, but more on the arms than elsewhere. The face was free. It was located on both the flexor and extensor aspects. The patches varied in size, up to an inch and a half in diameter. Their appearance was quite characteristic, but the scales were not so thick as they sometimes are in ordinary psoriasis. In no case was there a history of syphilis, and in Dr. Spencer's patient syphilis could, with certainty, be excluded.

Epilepsy Followed by Apoplexy.

Dr. Charles Anderson, Acting Assistant Surgeon, U. S. Army, writes from camp on Snake River, Wyoming, to the *Medical Record*, Oct. 29, 1881, as follows:—

Although the occurrence of fits of epilepsy and apoplexy in a patient within a short time of each other is not unheard of, yet without doubt it is rare enough to put on record as a case of some interest.

On the evening of December 18, 1879, I was called to see a man who had just had a "fit." The messenger described the man as having fallen suddenly, and, to use his own words, "foamed at the mouth and rastled about in the snow for as much as ten minutes." Thinking there could be no doubt but that it was an ordinary epileptic fit, the messenger was given twenty grains of bromide of potash to give the patient. Following the messenger to their camp in fifteen minutes, I found, upon entering the tent, that the patient was sitting on the bed, in a half-dazed condition, as epileptics are apt to be just after an attack. His pulse was sixty-four per minute, soft and full; the pupils were dilated. He complained of nothing, but, on questioning, said he had a sense of fullness to the top and front of the head.

While talking to him his face flushed, and he complained of feeling dizzy, and shortly afterward said he felt a numbness over the whole right side. This remark did not strike me at the time. The idea that it was *petit mal* being uppermost, he was given another dose of bromide of potash. In about an hour word came that the man was a great deal worse. On visiting him immediately, I found him unconscious; pulse, twenty a minute, very weak and irregular; respiration about twelve, and of that peculiar puffing which is so characteristic of apoplexy. The pupils were contracted and immobile. I gave him a hypodermic injection of one cubic centigram of fluid extract of ergot with one fourth of a grain of morphia sulphas, and left directions that, *if* he recovered enough to swallow, he was to be given a drachm of the fluid extract of ergot every two hours.

On account of the man's condition and surroundings, I never expected to see him alive again. It was no little surprise the next morning to hear that he was not only not dead, but very much better. At ten o'clock A.M., he was conscious, pulse eighty and regular; paralysis of the right side marked, but not profound. No pain, but a tingling sensation over the whole right side. He was removed to an A-tent and given fluid extract of ergot in drachm doses, three times daily for a week. The improvement was marked and continuous, and recovery was complete. He was able to sit up on Christmas day, and left camp on January 8, 1880.

Previous to this attack he said he had about fifty epileptic fits, but never had anything like apoplexy. He had never had syphilis or rheumatism, and had never been a drunkard.

This case is another illustration of how some

men will recover from serious troubles under the most unfavorable conditions. To be sick in a tent during a ten day's winter storm, with the wind from twenty to thirty miles an hour, and the mercury—20° F., surely speaks of vitality and recuperative powers little short of miraculous in the man who recovers.

Total Extirpation of the Uterus for Cancer.

This operation may be said at present to be on its trial, for surgeons are not yet agreed as to whether the prospect of benefit outweighs the risk. The statistical accounts that have as yet been published are incomplete; and therefore, not quite in agreement. We want figures to show us, first, in what number of cases the operation itself proves fatal, and then, in how many of those who recover from the operation, the disease returns. The statistics are not in agreement; first, because improvements are being made in the technique of the operation, and in estimating the probable future mortality of an operation, we must reject cases in which the operation was not done in the way which better knowledge has shown to be the safest, and also because some cases, published as cures, have afterward relapsed. Bearing in mind these errors, the following statistics will be interesting:—

Mikulicz (*Wiener Medizinische Wochenschrift*, 1880, No. 47), quotes from Ahlfeld a table of sixty six cases, out of which forty-nine proved fatal; in four the operation could not be completed, and of the thirteen who recovered, in six relapses occurred; of the remaining seven, in some the period since the operation, at the time the figures were compiled, was too short to allow the occurrence of relapse to be considered improbable. Some later statistics are more favorable. Kleinwachter, writing at the beginning of the present year, collected ninety-four cases of operation, with twenty-four recoveries; but Kaltenbach, writing about the same time, out of eighty-eight cases enumerates thirty as successful. These figures evidently want sifting. They all relate to cases in which the uterus has been extirpated by abdominal section. Olshausen has collected (*Berliner Klinische Wochenschrift*, No. 35, 1881), forty-one cases in which the uterus was removed by the vaginal method; of these twenty-nine recovered and twelve died. To these he adds six performed by himself, all of whom, so far as the operation was concerned, were successful.

On Sympathetic Ophthalmia.

Dr. Max Knies says (British *Medical Journal*), in connection with this subject there are three considerations: 1st. The character of the inflammation in the first eye. 2d. The form of the inflammation in the second eye, which is to be looked upon as undoubtedly sympathetic. 3d. The length of the period elapsing between the two inflammations. On the first point there are probably few who do not hold the view that a sero-plastic inflammation of the uveal tract is of summary causal importance. Alt's statistics show that in ninety-five per cent. there exists at the same time a scar on the sclerotic, indicative of a traumatic origin of such inflammation. On the second point opinions differ widely, greatly on account of insufficient attention being given to the difference between sympathetic irritation and sympathetic inflammation. The first must be looked upon as a neurosis involving the motor, sensory, and vaso motor functions of the ciliary nerves, and, like other neuroses, is characterized by the fact that *cessante causa cessat effectus*. The true sympathetic inflammation is a sero plastic neuritis, which, having once set in, resists all treatment. Knies admits no such classification into serous, malignant and plastic forms as has recently been made by Mauthner, but maintains that the inflammation, though serous at first, all but invariably assumes successively these graver types, and ends only with destruction of the eye. Symptoms of irritation may begin at once and persist for long without interruption. The true inflammation seldom begins before the end of the third week, so that every affection arising sooner than three weeks after the lesion in the first eye, or much later than three weeks after the enucleation of that eye, can only be admitted to be of the nature of sympathetic inflammation when there are very strong reasons for entertaining this view. With regard to the nature of the transference from one eye to the other, three theories are discussed: *first*, transference by the sheaths of the blood vessels; *second*, by the ciliary nerves; and *third*, by the optic nerve. This last is the view supported by Knies; but is must be said that his arguments in favor of it are not of a very convincing nature.

Veratrum Viride in the Treatment of Chorea.

The following report of a case of acute chorea, successfuly treated with large doses of veratrum viride, was read before the South Carolina Medical Association in April 1881, by Dr. F. E. Gary, of Abbeville, S. C., and was published in their *Transactions*:—

F. B., while at college the past winter, suffered from a very severe attack of acute rheumatism, and while convalescing from this disease, and when it was supposed he was nearly well, irregular movements of the muscles, so characteristic of chorea, were noticed. At first, these movements were confined to the left side, but as the disease advanced they became general. He was put upon the most approved treatment for chorea—such as iron tonics, oxide of zinc, chloral, arsenic, cimicifuga racemosa, etc. No benefit was derived from the administration of these remedies, and as the symptoms were becoming more aggravated, such as difficult deglutition, the drawing of the mouth to one side, the rolling of the eyes in various directions, flushed face, pain in the head, constant movement of the hands and feet, quick pulse, etc., threatening a fatal termination from congestion of the brain, it was determined to put him upon large doses of veratrum viride, ten drops every two hours, increasing two drops each dose until nausea, or a considerable reduction of the pulse should be observed.

Just after the administration of the fourth dose of eighteen drops, there was free emesis, and a reduction of the pulse to fifty beats, with great prostration; this, however, under a dose of stimulants, soon passed off, when it was observed that there was great improvement in the choreic movements, which just before had been so violent and serious. The treatment was continued in smaller doses, increasing the quantity in proportion to the movements induced by the chorea. The case continued to improve daily, and at the end of two months was dismissed cured.

Chloral and Bromide of Ammonium in Febrile Delirium.

Dr. C. H. Hughes, of St. Louis, writes, in the St. Louis *Medical and Surgical Journal* for November, 1881:—

An extensive experience with these therapeutic agents in the delirium of fever justifies its confident commendation to the practitioner of medicine; an experience begun many years ago at Fulton, with their use in the delirium of mania, and extended there and elsewhere to delirium associated with all other forms of disease, from that of typhoid and the exanthemata to delirium tremens and aggravated hysteria. In fact, no drug, in hysteria, equals a full resistless dose of choral, the patient usually awakening from her "tantrums," refreshed, rested and tranquil in her nerve centres which for hours before were all unstable and unstrung.

The true therapeutic principle in the use of these valuable agents is tranquillization and the recuperation and resistance to decay which the restraint exerted by them brings about. The ammonium bromides for use during the day, and the chloral once only at night. Twenty to thirty grains of the former, *ter in die*, and as small a dose of the latter as will induce sleep at night, and largely diluted with water, milk or beef-tea, the beef-tea being preferable in all typhoid states.

While large doses of chloral are indicated in maniacal excitement, in febrile delirium only small doses are required.

To periodically arrest cerebral disintegration in febrile delirium, at the natural time for sleep, is a point gained each day in the direction of restoration, as shown in the often apparent improvement of the patient after each waking, and enables the *vis medicatrix naturæ* to better fight the battle of life, with destructive disease.

The Value of Mental Tension.

Dr. J. Mortimer Granville says, in *Popular Science Monthly*, for November: A certain degree of tension is indispensable to the easy and healthful discharge of mental functions. Like the national instrument of Scotland, the mind drones wofully and will discourse most dolorous music, unless an expansive and resilient force within supplies the basis of quickly responsive action. No good, great or enduring work can be safely accomplished by brain force without a reserve of strength sufficient to give buoyancy to the exercise, and, if I may so say, rhythm to the operations of the mind. Working at high pressure may be bad, but working at low pressure is incomparably worse. As a matter of experience, a sense of weariness commonly precedes collapse from "overwork"; not mere bodily or nervous fatigue, but a more or less conscious distaste for the business in hand, or perhaps for some other subject of thought or anxiety which obtrudes itself.' It is the offensive or irritating burden that breaks the back. Thoroughly agreeable employment, however engrossing, stimulates the recuperative faculty while it taxes the strength, and the supply of nerve force seldom falls short of the demand. When a feeling of disgust or weariness is not experienced, this may be because the compelling sense of duty has crushed self out of thought. Nevertheless, if the will is not pleasurably excited, if it rules like a martinet, without affection or interest, there is no *verve*, and, like a complex piece of machinery working with friction and heated bearings, the mind wears itself away and a break-down ensues.

Reviews and Book Notices.

BOOK NOTICES.

A Text-book of Physiology. By M Foster, M.A., M.D., F.R.S., Prælector in Physiology and Fellow of Trinity College, Cambridge. Second American from the Third and Revised English Edition, with extensive Notes and Additions, by Edward T. Reichert, M.D., Demonstrator of Experimental Therapeutics, University of Pennsylvania. With 259 illustrations. Philadelphia: Henry C. Lea's Son & Co. 1881. Sheep. 8vo, pp. 987.

The first American edition having been exhausted in the short period of one year, the editor has availed himself of the opportunity to carefully revise the material added to the text of the former edition, and to make such additions as recent advances in experimental physiology call for. By a slight change in the typographical arrangement, this has not increased the bulk of the volume; on the contrary it has been diminished by thirty-three pages. A few old and imperfect cuts have been exchanged for new ones. This work will long hold its place as a standard text-book on physiology.

Transactions of the Medical Society of New Jersey. 1881. pp. 311.

The address of the president, Dr. A. N. Dougherty, was upon "Pleural Effusions, with Special Reference to Pyothorax." This paper we have already referred to elsewhere. Dr. Stephen Wickes gave a historical review of the society during the past twenty-five years, since he was first introduced as a delegate from the Essex District. Dr. G. H. Balleray, of Paterson, read an essay on "Laceration of the Cervix Uteri," and Dr. Charles J. Kipp, of Newark, on "Eye Affections from Malarial Poisoning." The remainder of the volume is made up of reports of committees, obituaries and district societies' reports.

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THOUGHTS ON THE MISSION OF MEDICINE.

In an oft quoted passage, the philosopher DESCARTES wrote, some two and a half centuries ago: "If it is possible for the human race to attain a perfect condition, the means must be looked for in Medical Science."

There is a certain obscurity in this famous saying, and that is in the meaning attached to the words "to make perfect" (*perfectionner*). The religious enthusiast of one way of thinking will say that the condition of perfection is the complete subjugation of the physical wants to the mental control; while those of another school, preach that it is the temperate enjoyment of all pleasant things.

If it is expected of our profession that the perfecting of the race is one of its ever present, and, on the whole, its most important future duty, then it behooves all of us who have entered its sanctuary to get some definite, and if possible, some correct notion, of what this condition of perfection is, toward which we should be guiding or pushing our fellow beings.

When we seek for some gauge or criterion of an advance toward a perfect condition, it appears to be tolerably well agreed upon among philosophers and political economists, and such like deep thinkers, that this gauge or measure is to be found in the emotion or mental conditions of *Happiness*. Thus, the most famous of the political schools of this century took for its maxim, "The greatest happiness of the greatest number." This aphorism has been attacked with great vigor, and its incompleteness shown, but as a broad statement it is still valid, and, for that matter the Golden Rule itself may be twisted into the form of a cruel and unjust law of action.

To lead men toward perfection, therefore, is accomplished by rendering them more happy. Let us assume this as granted, and pass to the next inquiry as to what are the conditions of happiness. Here, an interesting diversity of opinion presents itself. The ancients did not generally explain happiness as closely related to the physical life, but rather to the mental. Thus ARISTOTLE laid down the celebrated definition: "*Bene vivere et bene agere*"—that to live well (*i. e.* virtuously) and to act well, is synonymous with being happy. This was the *summum bonum*, which expression is not to be understood as the "highest good," but as the "greatest happiness." It is, and always has been the aim of religious happiness to teach this, but unfortunately for the votaries, the religious philosophers seem to have found their greatest delight in falling foul of each other, rather than in pursuing this goal of their theories.

A learned modern writer, Prof. WHEWELL, makes a nice distinction. He says, "as *pleasure* is the aim of mere desire, so *happiness* is the aim of wisdom." After reading this taking phrase over several times, we remain in doubt whether it is anything more than a playing with words. It is distinctly contrary to the modern view. The latter is well and tersely put by ALEXANDER BAIN—"Happiness is the surplus of Pleasure over Pain." Here, it seems to us, we get down to "bed rock," to a practical working formula. Remove or diminish *pain*, and we thereby increase pleasure, and thus confer hap-

piness. This puts the matter in such a shape, that we can work at it with cheering signs of visible progress, and with reasonable hope of great future attainments. If this means perfecting the human race, the task, though arduous, is not impossible. Thoughtful physicians have recognized this. Thus Dr. MARTIN, in his book on the *Diseases of Tropical Climates*, made the remark: "It may reasonably be supposed that by rendering men more healthy they will become more happy."

Security from accidents, from epidemics, from painful or dangerous complaints, could it be had, would remove a source of intense anxiety and unhappiness. COLERIDGE expresses this in a punning remark: "Happiness is a state, the perfection of which consists in the exclusion of all *hap*, that is, chance." There is sagacity in this, and it discloses to us why there is so much more solid happiness in a well ordered state, one of settled government, than in a condition of anarchy. It hints, too, at how much we further this object in removing apprehensions about health, by lessening the avoidable causes of disease.

NOTES AND COMMENTS.

Syphilis in Japan.

In a communication to the *Pacific Medical and Surgical Journal*, Dr. Stuart Eldridge, of Yokohama, says, that although the prevailing opinion that syphilis contracted from a Japanese is of a peculiarly severe and intractable nature is entirely erroneous, yet there are some peculiarities in the nature of the primary lesion as met with in foreigners, which are worthy of notice. A surgeon who should take as invariable, or even usual guide, the dicta that early development, plurality, absence of defined induration and suppurating bubo exclude the possibility of constitutional infection, would in Japan find himself woefully mistaken, as some have done. A cursory survey of, say, the venereal ward of the General Hospital for Foreigners in Yokohama, would, apparently, afford evidence of the existence of a large proportion of chancroid in the gross sum of venereal disease. Chancroid is, on the contrary, the rarest of the diseases of its class, and no matter what the apparent nature of the primary sore, constitutional infection is pretty certain to follow.

It must not be understood that all initial lesions are of this doubtful character, for by far the larger proportion of cases of syphilis take origin, here or elsewhere, in typical Hunterian sores or one of the various other modifications of the infecting sore described in the books. Primary sores of all kinds, as a rule, are amenable to simple treatment, and phagedæna or other serious complications rare.

In reference to the prevalence and nature of the disease among the natives, there is more to be said. Syphilis in Japan is almost commensurate in its distribution with human life itself. All ranks of society suffer, and probably in proportion far more nearly equal than in most other countries. It is very exceptional to find a male Japanese who will not acknowledge that at some time he has suffered from syphilis.

The earlier manifestations of the disease are everywhere met with. The later and more serious lesions, are excessively rare.

Acquired syphilis is in the Japanese of the mildest form, and rarely progresses beyond the earlier of the so called secondary symptoms; while recovery is rapid and generally complete. So true is this, that it is sometimes very difficult to find upon the person of a native who gives an unmistakable history of an attack of syphilis some years before, any corroborative evidence of the usual kind, such as scars, other than primary sore, nodes, or even glandular engorgements.

Like in other countries where the disease has run riot for centuries, the people have acquired a comparative immunity from its graver effects, and it has to a certain extent worked its own cure. This may be due either to gradual attenuation and weakening of the virus, or, as the author is inclined to believe, to an insensibility to its action, the result of a universal taint.

On the Cause, Prevention and Cure of Rabies.

Dr. L. L. Dorr, of San Francisco, in a communication to the New York *Medical Journal and Obstetrical Review*, for November, 1881, holds that a dog of a pure and original breed is incapable of generating rabies, and that it never appears in any land until such dogs breed in and-in with dogs of other countries, producing the mixed or mongrel dog. All dogs receive and give the contagion, but only the mongrel can *generate it.*

In support of this opinion, he quotes numerous

authorities who, from observation, have arrived at the same conclusion, and also points out that the crossing of different races of mankind invariably produces inferiors, natural criminals and idiots. The same is also the case with other animals. He therefore believes that if dogs of different breed were prevented from crossing or their progeny disposed of, rabies might be prevented. He further on makes the somewhat sweeping statement that along the entire Pacific Coast, from Behring's Strait to Cape Horn, not a well authenticated case of rabies was ever known. He regards this immunity as due to certain atmospheric conditions, and thinks that a test of the power of the climate of the American Pacific coast to prevent the development of rabies could easily be made, with strong probability of proving a blessing to hundreds of human beings who have no other hope. The period of incubation is so long in many cases that several dogs known to be badly bitten by a dog known to be suffering with rabies could be sent here under guard and kept behind prison bars and under observation until the extreme limit passed. Or a more practicable plan might be to have a number of the many persons who are annually bitten by rabid dogs in the Eastern States and Europe come to this coast, and remain here until the extreme limit of the possibilities was passed, selecting any place from Cape Horn to Behring's Strait, preferably, however, California, where they have a varied climate and all kinds of dogs, and are in close communication with all parts of the world. The patient having a knowledge of these facts, and the support of the hope of escape, it might be a power to prevent an attack; and, if he were attacked, the disease might be so modified by the climate as to render it susceptible of cure.

On the Removal of Warts.

Dr. W. Allan Jamieson says, in the *Practitioner* for September, 1881, that chromic acid, one to one of water, is by far the best remedy. The skin round each wart is first protected by painting it with oil, and then the wart itself is soaked with the solution of chromic acid; this absorbs water from the tissues, coagulating and hardening the albuminous tissues at the same time, and the unsightly warts soon disappear. These warts seldom appear after puberty on the hands, but a healthy girl, well grown, aged fifteen, came to the writer some time since with dozens of them on her hands, which had annoyed her for six years. Of course they much interfered with work, being always in the way. Steady use of the chromic acid removed them in a few weeks.

Uses of Chaulmoogra Oil.

A foreign exchange says, Chaulmoogra oil, which has obtained a certain reputation in India for the amelioration of the symptoms—I will not say the cure—of leprosy, has been introduced into this country with the somewhat vague reputation of being useful in skin diseases. It has answered well in my hands in some cases of eczema of the face which had passed the moist stage and tended to become dry. It seems to act as a mildly stimulating astringent, but its applicability is certainly limited, and experiments with it in Germany, recently reported, have not increased its reputation. It is in the strumous forms of eczema of the face in children and young persons that the best results from its use have been attained.

Convalescence of Typhoid Fever.

Dr. Bravie, in his dissertation on this subject, in the *Gazette des Hôpitaux*, comes to these conclusions: 1. The pulse and the temperature approach the normal; but still, the pulse sometimes remains frequent, and that for a long time. 2. The weight of the body is constantly on the increase, and whenever we find it diminishing or remaining stationary, we have reason to fear some accident, and must search out for its cause and nature. 3. The muscular force increases daily, in a constant and regular manner. 4. Urea is excreted in a large quantity during confirmed convalescence, so that it may sometimes be double the weight of that excreted in the normal conditions. When convalescence is nearly completed the quantity diminishes, more and more approaching the physiological condition.

New Treatment of Syphilis.

The Paris correspondent of the *Lancet* writes: M. Martineau has published the result of a large number of cases of syphilis treated by a new method at the Hôpital Lourcine. The preparation employed consists of a mixture of powdered peptone, chloride of ammonium, and bichloride of mercury, which are dissolved in water and glycerine. In order to have a standard solution which shall contain five centigrams (.02 grain) in a gram, the following proportions are taken:—

℞.	Powdered peptone (Catillon),	grs. ix
	Chloride of ammonium,	grs. ix
	Bichloride of mercury,	grs. vj. M.

These are dissolved in glycerine, seventy two grams; water, twenty-four grams. This solution, which the author calls "normal," further, diluted with five parts of distilled water, is of

such strength that an ordinary French hypodermic syringeful represents ten milligrams, or one-fifth of a grain of corrosive sublimate. The solution is injected subcutaneously, and the dose employed by M. Martineau has varied from two milligrams ($\frac{1}{25}$ grain) to ten ($\frac{1}{5}$ grain) of bichloride of mercury. Altogether one hundred and seventy-two patients have been under observation, and a total number of three thousand eight hundred and thirty-eight hypodermic injections made. No abscesses or sloughs have ever followed the operation; sometimes a defective injection has given rise to a lump, but this has always rapidly disappeared. There is never either stomatitis or salivation, even with one-fifth of a grain of the mercuric salt daily.

Opacity of the Vitreous Relieved by Galvanism.

Our foreign exchanges mention an important discovery announced at a recent meeting of the Paris Academy of Medicine. M. Giraud-Teulon has had occasion to deal with twenty-four cases of opacity of the vitreous humor within the last fourteen years, and all of these have been submitted to treatment by galvanic currents. Twenty-two have been notably modified, a marked clearing up of the vitreous humor taking place. In most of these the sight was correspondingly benefited, although in some instances further and deeper mischief remained to prevent vision. Twice only was the constant current unable to clear up the opacity, but these were cases of neo formations of syphilitic origin. M. Giraud-Teulon's high scientific position makes these statements of great importance.

Free Fluorine.

Hitherto chemists have never succeeded in isolating fluorine, on account of its great affinity for every known element except oxygen, with which it does not combine. The Boston *Journal of Chemistry*, for October, 1881, however, informs us that the discovery by Loew, of the presence of free fluorine in a certain variety of fluor-spar, found at Wolsendorf, in Bavaria, has just been announced. This spar is dark violet in color, and has a peculiar odor, which scientists have attempted to explain by various theories, but not very satisfactorily. Loew came to the conclusion that the odor might be due to free fluorine; and, to test his hypothesis, he ground a kilogram of the Wolsendorf spar with water containing ammonia, using small portions at a time, the filtrate and wash-waters from the earlier being used with the later quantities. The last filtrate was mixed with sodium carbonate and evaporated; the residue treated in a platinum capsule with sulphuric acid, and covered with a watch glass, kept at 40° to 50° C. for a long time. On examining the glass it was found to be considerably corroded. Since fluor-spar is not entirely insoluble in water, the experiment was repeated, using the inodorous mineral. The result was so exceedingly feeble as to dispose entirely of this objection to the former result.

Since the odorous spar contains cerium, Loew believes that the free fluorine is produced by the spontaneous change of ceric fluoride into cerous fluoride and fluorine.

Health Resorts on the Pacific Coast.

Mrs. M. P. Sawtelle, M.D., editor of the *Medico-Literary Journal*, published in San Francisco, calls attention, in the October number, to the health resorts on the Pacific coast, and especially to Monterey, where the exquisite beauty and variety of scenery are diversified with ocean, bay, lake and streamlet, mountain, hill and valley, and groves of oak, cypress, pine and other trees.

In the climate of Monterey, says she, there is an even temperature that can be found nowhere else, not even at Nice and other renowned watering places on the Riviera or Mediterranean coast. All the attractions that the clear skies of Greece and Italy have had from remote times for residents of the north, are excelled by Montery.

The Monterey Bay is a magnificent sheet of water, and is twenty-eight miles from point to point. It is delightfully adapted to boating and yachting; and many kinds of fish may be taken at all seasons of the year. For bathing purposes the beach is all that could be desired—one long, bold sweep of wide, gently sloping, clean white sands—the very perfection of a bathing beach, and so safe that children may play and bathe upon it with entire security. There are also great varieties of sea-mosses, shells, pebbles and agates scattered here and there along the rim of the bay, fringed as it is at all times with the creamy ripple of the surf.

Change in Bone Texture in Hemiplegia.

The *Gazette des Hôpitaux*, states that in a communication to the Paris Hospital Society, Dr. Debove observed that in his practice at the Bicêtre he had frequent occasion to see fractures in the subjects of hemiplegia; these fractures always occurring on the hemiplegic side, there

being every reason to believe that changes took place in such cases in the osseous tissue, rendering it more fragile. In one case of chronic hemiplegia, he found that not only the fractured bone itself, but all the bones on the same side, had undergone such change. They were less heavy than on the sound side, the medullary canal was larger, and the substance of the diaphysis was less compact. Examined histologically, the Haversian canals were found much dilated and the bone porous. Chemical examination also shows that the diaphysis contains a larger quantity of fat. These fractures usually consolidate rapidly, the callus being somewhat more voluminous.

Inhalation of Eucalyptol in Pulmonary Affections.

Dr. William W. Moore, of Warren, Mo., states in the St. Louis *Clinical Record*, that he has for many years suffered from a pulmonary affection, and such a tolerance has been established that large quantities of muco-purulent material collect in the bronchi during the night, which become dry by morning by the constant withdrawal of moisture by the respired air. Thus, it requires much time and effort to remove the tough, tenacious collection each morning. He used the eucalyptol by inhalation from a handkerchief. It seems to permeate the minutest bronchioles, and to soften the morbid secretions, so as to enable him to expectorate without difficulty. His condition has greatly improved under its use.

On the Treatment of Puerperal Mania.

In a paper on puerperal mania, based on the study of twenty-seven cases, which was read before the Southeastern Kansas Medical Society, by Dr. C. P. Lee, of Pleasanton, Kansas, and published in the *Kansas Medical Index* for August, 1881, the author remarks:—

"In these cases I have derived much benefit from the entire exclusion of the solar light from the patient's chamber, enjoining quietness, and avoiding all unnecessary interrogation. A light, nourishing diet; the tepid bath once every day. But a little additional treatment is all that I regard as essential in the treatment of puerperal mania when no bodily disease exists."

Nitrite of Amyl and Nitro-glycerine for the Relief of Toothache.

Dr. F. P. Atkinson recommends, in the *Practitioner*, the application of either nitrite of amyl, or a one per cent. solution of nitro-glycerine, as an efficient remedy for toothache.

Special Reports.

No. XX.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M.D.

(*Continued from Vol.* XLIV, *page* 474.)

The literature of ophthalmology continues to grow rich rapidly, as contributions pour in from all parts of the world. Renowned and eminently scientific men, who devote themselves to this special branch of surgery, are daily recording their experiences, and it is a fact well worthy of remark that each modern addition savors more and more of *practical* medical or surgical worth. The following remarks, quoted from an exhaustive article by J. S. Fernandez, M.D., of Havana, with his conclusions deducted, are of especial value from a surgical standpoint:—

Amaurosis from Lesions of the Eyebrow or Orbital Region.—Wounds of the superciliary region, and the loss of sight which often follows, have always been studied with much interest, but so far no satisfactory explanation has been offered regarding the relation between the solution of continuity and incidental amaurosis.

Previous to the discovery of the ophthalmoscope many cases had been reported, but they are as vague as the more recent reports, in which an examination of the internal eye has been neglected. That the ophthalmoscope alone could solve the difficulties which envelop the matter is not so sure; but there is no doubt that a number of cases, watched from the beginning, and subjected to examination of the interior of the eye, would throw much light on the subject, and greatly reduce the difficulties now in our way.

The experiments of Vicq d'Azir on the lower animals for the purpose of solving the problem, are also lacking in the means of investigation furnished by the ophthalmoscope, and it may be stated that at present, and not excepting my own no complete reports of cases exist, for often if we are called to the patient immediately after the injury was received, he is not seen again at a later period; while, on the other hand, if the case presents itself after the occurrence of the amaurosis, seldom can we obtain a satisfactory account of the facts as they occurred.

Hölder collected 168 cases of fracture of the skull, of which 88 were of the base, and 80 of the roof of the orbital vault. Prescott Hewett gives 23 of the latter and 68 of the former variety, and Schwarz 66 of the orbital vault and 102 of the base of the cranium.

In 80 cases of fracture of the roof of the orbit mentioned by Hölder, in 54 the fracture involved the optic foramen. The optic nerve was partially or completely ruptured, and presented hemorrhagic foci in its substance, blood being effused under its sheath in 42 instances. The displacement of the bony fragments of the optic foramen directly injures the nerve, and hence, unilateral, complete and incurable amaurosis of sudden occurrence. Hemorrhage under the

sheath of the optic nerve is the occasional cause of amaurosis, and when the latter is double, fracture of both optic foramina extending across the pituitary fossa of the sphenoid bone must be admitted. It is probable that when the amaurosis is curable, it was the result of hemorrhage, intracranial or sub-vaginal. With a view to the settlement of the question under consideration, in so far as the lower animals are concerned, I have experimented on twenty-seven dogs, as follows:—

In the first group I divided, subcutaneously and to the bone, the tissues at the internal and external extremities of the supra-orbital arch, using Petit's knife, and cutting from right to left, and *vice versa*, as in neurotomy of the frontal branches. The wounds healed in twenty-four hours, and thirty days thereafter vision was still perfect on the side operated upon. To determine this the lids of the other eye were closed by sutures in all the dogs subjected to this series of experiments.

In the second group the integuments were divided along the supra orbital border, in the region which would more approximately correspond to the superciliary in man, and the bone exposed; the periosteum was cut so as to insure the division of the frontal nerves. The wounds were closed by sutures and soon healed, the result as to loss of sight being negative. The third and fourth series were subjected to cuts, more or less deep, by striking the exposed bone on the same region with a razor, but no alteration of sight followed.

Another group suffered contusions on the same place, one of the dogs being instantaneously killed. The others were temporarily stunned, but none had lost vision on the affected side thirty days afterward.

In the sixth series trephining was practiced, and water forcibly injected into the interior of the cranium with a syringe nine centimeters long by two in circumference. In none did blindness supervene.

In the last group a bony plate was detached in the same region, so as to expose the dura mater, which was not injured. Some hemorrhage followed the operation, but no amaurosis.

The following conclusions may be deduced from the foregoing:—

1st. Amaurosis following wounds of the eyebrow is generally the result of cerebral lesions, as proved by the fact that in the greater number of cases the patient loses consciousness, or dies soon after the accident.

2d. Although modern ophthalmological literature does not contain a single instance, followed up from beginning to end by ophthalmological examinations, two of my cases and Galezowski's observations go to show that amaurosis is due to atrophy of the papilla, and this to a cerebral lesion of more or less severity, or to injury of the optic nerve in its passage through the optic foramen.

3d. Those cases where the amaurosis is attributed to sympathetic action or excitability of the fifth pair of nerves, from whatever cause, occurred previous to the employment of the ophthalmoscope, and were open to erroneous interpretations.

4th. The amaurosis occasioned by simple irritation of the supra orbital nerve, from punctures, cicatricial distention, or any other cause, might at the present time be doubted, in the absence of a single complete clinical record to support it; but inasmuch as sympathetic amaurosis from excitability of the maxillary branch of the fifth has been observed, the possibility of a similar result as regards the supra-orbital, one of the three principal branches of the trigeminus, cannot consistently be denied.

5th. The entire identity between amaurosis from irritation of the superior maxillary supra-orbital nerves once conceded, the prognosis must be considered equally favorable in either case; for amaurosis from wounds of the eyebrow resulting in atrophy of the papilla, incurable.

6th. The experiments on dogs, inflicting divers traumatic lesions on the supra-orbital region have not been followed by amaurosis.—(*American Journal of Medical Sciences*, January, 1881). Translated from the Spanish, by A. B. De Luna, M.D., of New York.

Dr. Thomas R. Pooley, of New York, in an interesting article on *the detection of the presence and location* of steel and iron *foreign bodies in the eye by* the indication of *a magnetic needle*, says: A series of careful experiments were made to determine, first, whether unmagnetized particles of iron or steel will exert sufficient influence on a magnetic needle to indicate with certainty their presence at distances sufficient to make such method available for their detection in the eye. Second, to determine the practicability of rendering such particles magnetic at such distances as to be able to take advantage of their increased effect on the magnetic needle, for the detection of their presence and location in the eye.

We may draw the following conclusions from these experiments:—

1st. The presence of a steel or iron foreign body in the eye, when of considerable size, and situated near the surface, may be determined by testing for it with a suspended magnet.

2d. The presence and position of such a foreign body may most surely be made out by rendering it a magnet by induction, and then testing for it by a minute suspended magnet.

3d. The probable depth of the enclosed foreign body may be inferred by the intensity of the action of the needle near the surface.

4th. Any change from the primary position of the foreign body may be ascertained by carefully noting the changes indicated by the deflection of the needle.

P. concludes: It is not my purpose to claim more for this method than the facts sustain. Among other precautions in the conduction of my experiments, I have tried not to be magnetized myself by my interest in the subject. Much may yet be done to perfect the method. It seems to

me especially desirable that a more delicate needle than I have yet been able to obtain should be made use of. It is not too much to say that my studies of the method lead me to predict a useful future for it in practical ophthalmology. (*Archiv. Ophthal.* Vol. IX, No. 3.)

MYOTIC ALKALOIDS.

The mode of the action of drugs which affect the pupil has always been a somewhat obscure subject, and an investigation into the mechanism by which pilocarpine contracts the pupil, by Drs. LABORDE and FITZGERALD, is of considerable interest.* Five milligrams of the hydrochlorate of pilocarpin injected beneath the skin of an animal determines, in five minutes, not merely general diaphoresis, but also a strong contraction of the pupil, and this, even though the third nerve has been previously divided, so that the central influence on the sphincter is at an end. The drug must, therefore, act by stimulating locally the fibres of the sphincter, or it must paralyze the sympathetic innervation of the dilating fibres. The local action, although intelligible when applied locally, is scarcely conceivable when it is introduced into the general system. The action on the sympathetic seems the more probable. If the third nerve has not been divided, and the action of the drug is closely watched, the first effect is a fixation of the pupil in a state rather of mydriasis than of myosis, apparently due to a simultaneous act, paralysis of both muscles; then the sphincter gets the ascendency, and the pupil slowly contracts. That such a double action really takes place, is shown by the effect of the drug when the sympathetic has been divided, the third nerve being intact. Then, the action of pilocarpin is to slightly dilate, not to contract the pupil. Thus there is reason to believe that the drug acts as a paralyzing agent upon both sets of the nerves of the iris, and the myosis is due to its action upon the third nerve being less than its action on the sympathetic, or to the fact that, when both are paralyzed, the tonic force of the sphincter is the more powerful.

In *the treatment of chronic mydriasis* we have frequently noticed a precisely similar action on the part of the alkaloid eserine (from 1 to 4 gr. solution) and after carefully watching, first the fixation of pupil, then its dilatation, and subsequently slow contraction, and have felt satisfied in the explanation as above, and according to Drs. LABORDE and FITZGERALD. Then, too, as the action of the drug passed away the reverse was the case, and in so far as eserine was concerned the reflex, as it were compensating, action occurred, and the mydriasis was temporarily increased. Therefore *weak* (from ½ to 1 grain) solutions of eserine are by far the best in the treatment of chronic mydriasis from any cause; the instillations to be of service, must be *regular* and *frequent*.

It may be noted, however, that Albertoni, and recently Harnack and Meyer, have come to a different conclusion. Finding that when the pupil is strongly contracted by pilocarpin, irritation of the cervical sympathetic still gives rise to considerable dilatation, they believe that pilocarpin causes contraction by stimulating the third nerve. The fact, however, is quite reconcilable with the observations of Laborde and Fitzgerald, since the paralyzing action which they assume may be on the central connection of the nerves, and then stimulating of the trunk would still cause contraction of the dilating fibres. In connection with the slight mydriatic action, which Laborde and Fitzgerald observed, it may be remarked that jaborandi has been found, by Drs. Harnack and Meyer, to contain an alkaloid, which they have termed jaborin, which dilates the pupil and has an action on the heart, the salivary glands, the intestines, and the central nervous system, exactly like atropin, and which is found also, like it, to antagonize the action of muscarin. These authors point out that many commercial preparations of pilocarpin contain also jaborin, and the presence of this substance may explain the mydriatic effect of pilocarpin observed by Drs. Laborde and Fitzgerald at the commencement of its action and after the sympathetic had been divided. It is evident that to furnish conclusive evidence that pilocarpin acts on both sets of nerves, their experiments must be repeated with a preparation of pilocarpin from which all jaborin has been removed. It is possible that jaborin may turn out to be actually identical with atropin or with hyoscyamin. (*Lancet*, Nov. 13th, 1880).

IDENTITY OF THE MYDRIATIC ALKALOIDS.

Prof. A. Ladenburg of the University of Kiel, who has already made some important discoveries regarding the constitution and products of decomposition of alkaloids, publishes the results of further investigations on the solanaceous alkaloids, atropine, hyoscyamine, daturine and duboisine.* His experiments, which seem conclusive, show that hyoscyamine, daturine and duboisine are identical with each other, and not merely closely related; and that atropine and hyoscyamine, though not actually identical, are isomeric in composition He concludes, therefore, that there occur in nature only two mydriatic alkaloids, namely, atropine and hyoscyamine.

When hyoscyamine is decomposed (with baryta or hydrochloric acid) it forms two new products, which were heretofore denominated hyoscine and hyoscynic acid.

Under similar conditions, atropine furnishes

* *Lancet*, Nov. 13, 1880.

* Berichte d. Deutschen Chem. Gesellsch. Vol. XIII, 1880.

tropine and tropic acid. Ladenburg has now ascertained that both the acids, hyoscynic and tropic, and the secondary alkaloids, hyoscine and tropine, are identical.

Hyoscyamine may be converted into atropine, and on decomposition, both of these alkaloids yield identical products (*American Journal of Medical Sciences*, Jan. 1881, p. 280).

On the Cause of the Tendency to Progression in Myopia, Javal (*Annals d' Oculistique*, August, 1880), considers it important for myopic eyes to avoid as much as possible any effort at accommodation. In slight degrees of myopia, *i.e.*, under three to five dioptrics (12″ to 7″), he gives convex glasses for reading; when the myopia is greater, concave, which bring the far point to thirty centimeters, or thereabouts. This treatment which he has adopted for many years, has, he considers, been highly effectual in preventing the myopia increasing. He does not accept the view of Donders or Giraud-Teulon, that convergence tends to increase myopia, owing to the pressure of the internal recti. Another explanation seems necessary. Taking into consideration the extreme frequency of myopia in persons who read a great deal, and its rarity among needlewomen, who are obliged to keep up quite a constant convergence, the principal peculiarity in reading would appear to be the variations in the amount of accommodation which are necessary. Thus the difference in accommodation for the middle and ends of a line, increases as the page is held closer to the eyes, so that, to take an extreme example for a myopic of fifteen dioptrics (2½″) a line ten centimeters in length, would demand a variation of accommodation equal to seven dioptrics. No mention is made of the invariable compulsatory movements of the head in such cases."—Edinburg *Medical Journal*, November, 1880.—*American Journal of Medical Sciences*, January, 1881.

There is but little doubt left in our minds but that efforts at accommodation are, as Javal states, to a great measure not only one cause of progressive myopia, but also *the cause* of acquired myopia, and especially is this latter the case in school children.

What then can be the cause of the existence of so large a percentage of weak eyes and myopia (near-sightedness), as is found among our school children? If, as Javal states, and we believe it to be a fact, progressive myopia is caused by efforts at accommodation on the part of myopic eyes, so on the other hand, *efforts* at accommodation will not only cause an increase of preëxisting myopia, but also induce myopia in preëxisting emmetropic, especially young susceptible eyes. In our opinion, based upon experience and the laws of physiological optics, it is not only 'near work," which is said to do the same, but also *efforts at far-off work*, coupled with spasm of accommodation, due to the embarrassment consequent upon having *fixed points for either near or far vision, light improperly arranged, etc.*

(To be continued.)

Correspondence.

Points about Vaccination.

Ed. Med. and Surg. Reporter:—

On the 15th of October I vaccinated a healthy male child, aged nine months. A fresh quill of bovine virus was used. It was obtained directly from one of the best vaccine farms. The operation was performed carefully. The virus was introduced at two abrasions. By the fourth day the evidence of irritation at both abrasions was almost entirely gone; and at one only was there anything like a papule. By the sixth day there was no reason to even hope that a vesicle would result, save at one of the abrasions. On the eighth day two small papular elevations existed at the side of the abrasion, but did not appear to be of any account. On that day I decided to repeat the operation, taking the virus from a good vesicle on the arm of the father of the child, which vesicle was the result of vaccination on the 15th, with the remains of the quill used on the latter. Two abrasions were made, one of them close by the two papular elevations. Two days afterward the two papules had become transformed into a fine, large umbilicated vesicle, which was surrounded by a marked areola of over two inches in diameter. At the other abrasion there were some thickening and considerable redness that day; and next day there was a good, though not large vesicle with an areola nearly as large as the one around the other vesicle. The course of both vesicles afterward was regular and both went through their stages synchronously.

Now was time all that was necessary to transform the papular elevations spoken of into a vesicle? It is likely that it was; still, it is possible the virus inserted the second time, precipitated the result.

The circumstances of the vesicle which resulted from the second virus inserted, forming and forming so speedily, as to overtake the other, were to be expected. Experiments made by Jenner himself, and by Mr. Bryce and others, showed that a second vaccination, if effective, develops so quickly as to catch up with the other before the stage of maturity is reached, but to be effective, at least, when humanized virus is used, it it must be done within a certain time; within the fifth day, as a rule. In his comprehensive book on vaccination, Dr. Seaton says: "If at any period, not later than the fifth day from the successful insertion of vaccine lymph into the arm of a child, a fresh insertion of lymph be made, the second vaccination will take effect as cer-

tainly as if no previous vaccination had been done; but the vesicles arising, while corresponding in size to the date of their origin, will overtake, in their course, the vesicles first made, will arrive at maturity and will fade at the same time with them." And, again, "That the result may follow a second insertion of lymph, such insertion must be always made within five days, *i. e.* within five times twenty-four hours from the primary insertion. If it be delayed beyond this, it will fail; there will either be no result, or a mere hard pimple. No doubt there are apparent exceptions to this rule, and cases are now and then met with, where lymph takes effect, though not inserted until the sixth or seventh day of the vaccination; but these it will be found are not real exceptions, they are simply cases in which the course of the vaccination has been retarded, the areola instead of appearing on the eighth day of the first insertion, not coming out until the ninth or tenth."

As soon after vaccination as the system has become influenced effectively, a second insertion of virus ceases to take effect. And just as long as a second introduction of virus will take effect, so long is the person liable to contract smallpox. In the case spoken of above, there was no protection afforded for nearly ten days after vaccination, or within a day or two of the average duration of the incubative stage of smallpox.

It would seem that as a rule bovine virus does not take effect as soon as humanized virus. It seems certain, too, that absence of effect is much more frequent with bovine than with humanized virus. Besides also retardation of effect for a considerable length of time is far more likely to occur with bovine than with humanized virus. Dr. Seaton holds that with good humanized virus, obtained directly from the arm on the seventh or eighth day, a careful vaccination should not fail oftener than once in every one hundred and fifty times; and in respect to the degree of certainty with bovine virus, he refers to a series of 4163 cases of children done under good conditions in which only 2614 or 62.79 per cent. proved successful. Failure with bovine virus is certainly very common. Such at any rate has been my experience with it. The only persons I have met who say that failure is extremely rare, are certain pharmacists and others who deal in virus, persons who speak without knowledge and who are saturated with the mendacity of trade.

The statements just made are deserving of very serious attention. Under various circumstances it is exceedingly important that vaccination should take effect as soon as possible, and that there should be as little uncertainty as possible about its proving effective. There is good ground for the opinion that if a child is in imminent danger of contracting smallpox, it is hardly justifiable to resort to bovine virus, even if on quills recently charged; humanized virus, which is known to be absolutely fresh and of good quality, if procurable, should be used; and the virus directly from the arm should be preferred to a scab. In the case cited, if the child had been exposed to the contagion of smallpox about the time he was vaccinated, the disease might have developed in spite of the latter.

I should say, then, that if a child in evident danger of contracting smallpox is vaccinated, and the disease develops within eight or ten days, the plea that the contagion had taken effect before the operation could be effective is not admissible, unless the virus which acts most quickly and most infallably, was used and introduced at not less than three or four points.

I have no desire at present to speak of the various objections which may be presented against the use of bovine virus, but in addition to what has been said, I may refer to one, and a very serious one, which springs from the uncertainty of effect from it, namely, that when it fails to prove effective, a second trial is apt to be postponed indefinitely. This is very frequently the case in persons in need of revaccination; in them, the fact that the virus has failed once to take effect, often leads to the belief, that the operation is uncalled for. In this way, I am sure, many are left unwittingly unprotected against smallpox. THOS. S. SOZINSKEY, M.D.,
Philadelphia, November, 1881.

Jaborandi in Croup.

ED. MED. AND SURG. REPORTER:—

I have just discharged, as cured, a little girl of seven years old, who had an attack of genuine pseudo-membranous croup of two weeks' duration, treated principally with fluid extract jaborandi and its active principle, pilocarpine. My experience with this disease in the past has been discouraging. Out of fifteen cases treated, during the last fifteen years, I cannot claim that I cured one, notwithstanding three cases were operated on, and the remainder had the benefit of modern remedies and appliances, and extensive consultation. Within the last year I prescribed for several cases of catarrhal croup, using jaborandi with yerba santa and grindelia robusta, with flattering results, and determined to try the same treatment for every case met, to prove the remedy.

On the 12th of October I was called to see Fanny B, aged seven, suffering with croup. As she had fever and headache, I gave her sedative remedies and quinine, until the fever subsided, and immediately thereafter commenced with jaborandi fluid extract, in twenty-drop doses every two hours. The remedy produced nausea and vomiting, and it was given in teaspoonful doses by enema, until the full effects were experienced.

The physiological effects of jaborandi resemble that of collapse, or more particularly the cold stage of congestive fever. The patient complained of heat, and threw off the covering, when she was cold and livid. Her extremities were livid and cold, and wet from perspiration.

After getting through with the quinine treatment, to relieve the patient of malarial influence, on the second day, the 13th, she commenced fairly with the treatment with jaborandi. All of the dyspnœa, and the dry brassy cough was superseded by a moist but still croupy cough, and almost natural breathing. By placing the patient on her back, so she could swallow the saliva, it was supposed the influence of the remedy would be protracted. The nausea and vomit-

ing was relieved by aromatic spirits ammonia, and reaction brought about by the use of dry heat, and sinapisms to the extremities. The patient took jaborandi every two hours, night and day, for nearly two weeks, and it was desirable to keep up a gentle salivation with moist fauces and larynx. which was accomplished, but the patient occasionally experienced a collapse. The repeated nausea generated a catarrh of the stomach, which was always relieved by oxalate of cerium. Pilocarpine was given after the patient conceived a dislike for the fluid ext., and the result was about the same.

On the third day of treatment a piece of membrane was detached and coughed up, three inches long, tubular in shape, and exhibiting a cast of the tracheæ. After this, she repeatedly coughed up small pieces of membrane.

As Dusart claims that his syrup of lacto-phosphate of lime will prevent the formation of membrane in pseudo-membranous croup, she took teaspoonful doses every two hours, with two grains of sublimed sulphur, alternating with the jaborandi. She also had the benefit of atomized lime water, several times a day. Lactic acid was also used by inhalation. As each day's treatment was a repetition of the preceding one, it is not necessary to follow up the details. The jaborandi evidently cured the case, as it relieved the urgent symptoms after the first few doses, and it acted not only on the salivary glands but on the glands of the fauces, and kept the inflamed larynx and trachea bathed in the secretions of these glands, and arrested the further formation of the membrane. Perhaps the sulphur and Dusart's syrup afforded some aid in bringing about such a happy termination. W. N. Ames, M.D.

Starkville. Miss.

Amyl Nitrite in Tinnitus Aurium.

Ed. Med. and Surg. Reporter:—

Seven years ago last August, in a journey from the White River Ute Indian Reservation, Colorado, to Rollins Station, Wyoming Territory, while in company with the United States mail carrier, I camped near a small stream for the night. Some time during the night or early morning, I was awakened by a buzzing, or rather what appeared a flapping of wings in my left ear. This continued without cessation during the remainder of the night, in spite of my efforts for relief. During the preparation for breakfast, and making the next station (twenty miles), the intervals of ease became longer and longer, and some time during the afternoon the buzzing ceased entirely. I distinctly remember that every flapping of its wings seemed to be accompanied by a struggle to release itself. No further trouble was experienced in the two days which it took to complete the trip—during my stay of a week—nor on my return to White River. Subsequently I remember some half-dozen transient attacks of tinnitus, with intervals of a year or more, until this last recent attack, which continued with unabated fury for about one week, night and day. After enduring it for a day or two, having a *little* nitrite of amyl, which had been partially absorbed in a cork at the bottom of a vial, I inhaled it, with prompt relief, but the noise soon returned. I then thought I would see what it was going to do, and watched symptoms; but as it kept up its distressing noise, I then concluded to consult a wiser head in this specialty of aural surgery. Suffice it to say, that the wisdom which I sought seemed to me to be foolishness, and I was thrown upon my own resources. "Necessity is the spur as well as the mother of invention." We doctors make poor patients. We won't stand much medication when it comes to our own precious bodies. I procured ℥j of Squibb's nitrite of amyl, turned some into a ʒij vial, and put on my handkerchief, for inhalation, what would be likely to come out from suddenly inverting the vial upon, and immediately compressing my handkerchief, with the result, at first, a modification of the tinnitus, in the character of the sound (lighter); then longer intervals of ease; finally, a decided sense of inexpressible relief; and remarked that I felt a positive change in that side of the face; I should add that it was about the average dose, ♏x, with no discomfort, or any untoward symptoms; on the contrary, it was followed by an increased exuberance of spirits, perhaps due, in part, to the achievement of success and happy relief. I do not find any authority for this therapeutic use of nitrite of amyl, other than this one successful case. I have my own theory of diagnosis in my case, but it is useless to speculate; if it should prove true I will follow this with another article.

My learned aural specialist in Boston, does not agree, however, with me, neither did he with my remedy, so we will wait for *facts*, *facts!* Will my medical brethren please apply this remedy in this affection (if they have not already done so), and report through these columns.

J. Dana Littlefield, M.D.

323 *Broadway, Somerville, Mass.*

Administration of the Muriated Tincture of Iron

Ed. Med. and Surg. Reporter:—

The following item, though small, I desire to communicate to the profession, through the medium of your widely extended journal. My excuse for offering it is, that in my experience it fills a place long vacant, for within the range of my observation nothing has yet appeared to answer the purpose so completely.

The tasteless and harmless administration of the muriated tincture of iron, has long been a desideratum of no little importance, and while the taste may be of secondary consideration, not so the teeth, which nearly always suffer from its use, and frequently remain the *opprobrium medicorum*. I therefore, in casting about for a safe vehicle in which to administer it, hit upon Planten's capsules of jujube paste or gelatine, and found them to answer very well. I now direct my patients to drop into the cup of the capsule as many drops of the pure tincture chloride of iron as I wish them to take, and then to replace the cap, which hermetically seals it, and place it in the mouth and swallow it with water in the usual way. The capsule, of course, is to be judged to the quantity of iron given. I am aware that gums, balsams, and

oils, have for a long time been given in capsules, but have yet to hear of the first case in which tincture of iron has been given in this way. Patients are much pleased with this new mode of taking it, and the security it offers to the teeth at once gain for us their ready coöperation.

J. H. GRIMES, M.D.

Baltimore, Nov. 8th, 1881.

[The question arises whether it would be wise to allow the undiluted tincture to come in contact with the mucous coat of the stomach, as it does when administered in this manner. Certainly, in some conditions it would be too irritating.—ED. REPORTER.]

NEWS AND MISCELLANY.

Florence Nightingale and Her School for Nurses.

The following interesting sketch of this distinguished philanthropist and her labors is given by Dr. J. M. Toner, in a recent address before the Nurses' Training School of the District of Columbia:—

Florence Nightingale began her life-work by acquiring a knowledge of nursing, in 1849, at Kaeserworth, an institution on the Rhine for practical instruction in the art of hospital nursing. During the Crimean war, in 1854–55, she entered with zeal upon the duties of her high vocation, and gained a world wide fame by her genius in the organization and superintendence of the nursing in the large military hospitals.

She retired from this field of work with broken-down health, from which she has never fully recovered. On her return to England she received a letter of thanks from the Queen, accompanied with a superb jewel. A fund of £50,000 was raised by subscription, and a Florence Nightingale Training School for Nurses established. A penny subscription was raised by the soldiers to erect to her a monument, which she declined. To this school, which bears her name, she is still giving her attention, being specially interested in the education of nurses for the poor. Many, if not all the pupils, are from among the gentlewomen of England and ladies of good social position. Although she is aware that the wealthy will induce some of those educated to nurse the poor to go into service for high rewards, still many of those educated in this school go on nursing the poor and doing good without regard to remuneration. Her description of the services rendered by the nurses to the poor was about as follows: Wherever sickness was found in a house, or application made for a nurse in a part of the city within the district assigned to one or more of the nurses, a visit is made by one of them and her services tendered to place the room in order and impart instructions to the family or attendants how to keep it so, and how to administer medicine and to wait on the patients. This assistance of the nurse was sometimes, though not often, declined. I inferred that it was commonly found that, besides scrubby sheets and pillow-cases, and sometimes a pillow, a couple of napkins, a drinking cup, a spoon, and a candle, or some such things were needed and supplied by the nurse. The house was visited by the nurse twice a day and the best practical regulations maintained in the sick-room, the most exact compliance with the doctor's directions for the administration of medicine and diet observed, and the patient's condition in every respect rendered as comfortable as possible. This service was nearly always found to be agreeable to the patient and their friends, as well as the physician in attendance. The attention of the nurse was continued until either recovery, removal to hospital, or death, rendered their services no longer necessary. Usually about the third day the nurses found the room put in pretty good order before their arrival, and courage and a confident hope of recovery established in both the patient and their friends.

Female Students at the Pennsylvania Hospital.

An interesting contest stretching over a quarter of a century, and involving an important principle, has recently been decided in this city.

The medical and surgical clinics at the Pennsylvania Hospital are now attended by a score or more of women students from the senior class of the Women's Medical College and students from that institution pursuing a post-graduate course. This is the first time that women students have been admitted to the general clinics at that institution, and also the first time in three years that they have attended any clinics in the hospital. Nearly a quarter of a century ago an effort was made to have the clinics opened to women students, but public opinion had not then been educated to such an innovation, and the application was negatived.

By 1873 the popular prejudice against women physicians had greatly lessened, and the managers allowed women students to attend a special clinic, which was held on Tuesdays, for their instruction. This privilege was exercised for five years, when the women ceased to attend, partly because they were not warmly encouraged by the demonstrators, on whom was imposed an additional lecture per week, and partly because they imagined that the instruction received was inferior to that given at the Wednesday and Saturday clinics for male students. At that time the demonstrators objected to lecture before mixed classes.

A short time ago the managers of the Women's Medical College received intimation that no objections would be made to women students attending mixed clinics at the Pennsylvania Hospital, as the managers had no rule positively prohibiting it. Accordingly six young women appeared at the next clinic, and the demonstrator proceeded with the lecture as if no women were present. At the following clinic there were a dozen women present, and at present the number of women attending is over twenty. No preference is shown them, nor does the demonstrator use false modesty in dealing with difficult subjects. The physicians in charge look upon the students of medicine only and do not distinguish between men and women. A few days ago some young women were late in arriving at Dr. Morton's clinic and found the front seats occupied. One of their number passed a note to the Doctor, requesting

him to ask the gentlemen to move back, that the w men might have seats. Dr. Morton replied that he did not recognize the right of women to the most desirable location in the lecture room, and that they must not expect any favors at the clinics. Dr. Morton was entirely right in this action, and such a request was wholly out of place.

Sanitary Condition of Key West.

The warm moist climate of Key West has advanced some claims for it to be considered a healthy resort for certain classes of cases. It is unfortunate that the local authorities do not keep it in better condition. Dr. S. M. Bemiss, of the National Board of Health writes:—

"The city has no financial resources or funds which might enable it to put into operation any efficient sewerage system. While a large portion of the island is sufficiently above tide water to make an underground system available, the contrary is true in respect to a very considerable portion of the town. Surface drainage is the only method employed to rid the town of sewage filth. This must always be objectionable in latitudes and localities where frequent rains and torrid heat favor noxious exhalations. But even this method is very poorly executed in Key West. The streets are badly graded, and pools of water are met with in a majority of them. If there are ordinances requiring the removal of garbage and privy accumulations, they are not properly enforced. It may be further stated that the dwelling houses in Key West are not constructed with reference to the sanitary well being of their occupants. They are for the most part constructed of wood, without chimneys or any provision for fires. In a great many instances the weather-boarding is badly, if at all, protected by paint or whitewash, and process of decay is astonishingly rapid in the almost perpetually alternating rains and sunshine of this locality."

He also states that there is a "lack of confidence in the candor of the local board." Unfortunately the habit of so many local boards of concealing the truth about infectious diseases for fear of "hurting business" is apt to excite this want of confidence quite generally. As we have repeatedly said, in the long run, falsifying facts (vulgarly termed "lying") don't pay in the long run in this matter.

Smallpox.

This disease is assuming an epidemic form in some portions of California. The State Board of Health has recommended the inspection of immigrant trains at some point near the boundary of the State, and if any persons be found to present evidences of variola, they and the cars in which they are passengers shall be quarantined, the cars disinfected, and all the other passengers shall undergo compulsory vaccination gratuitously. The board also recommends the inspection of express trains.

Sixty-nine cases of smallpox are reported at New Tacoma, Washington Territory, and several deaths. Physicians on the Pugalup Indian reservation report that two Indians who recently visited New Tacoma have died of the disease. New Tacoma has been placed under quarantine, and no one is allowed to enter or leave it.

Reports from different sections show the continued prevalence of this disease. A dispatch from Biddeford, Maine, says:—

"Owing to the prevalence of smallpox in this city all of the public schools have been closed. Over 3,000 persons have been vaccinated. There have been fifteen cases, six of which proved fatal."

Statistics of Drunkenness at Berlin in 1880.

In considering the project of law recently brought before the Reichstag by the Chancellor of the German Empire, for the more rigorous repression of drunkenness, it is not without interest, remarks *La Revue générale d'Administration*, to mention the results published by the prefecture of police of Berlin regarding the number of individuals arrested in that city during 1880. The number of persons arrested for drunkenness was 7895 (7313 men and 582 women). Among the men arrested 407 were under 18 years of age, 2575 were between 18 and twenty years, and 2201 between 30 and 40. Of the women, 12 were less than 18 years of age, 110 were from 18 to 30 years, 174 from 30 to 40, 161 from 40 to 50, and 125 were more than 50 years of age.

Surgeon-General Barnes' Report.

Surgeon-General Barnes has submitted his annual report, in which he states that the cost of medical and hospital supplies actually issued during the last fiscal year was $18,325,342. The total number of cases of all kinds reported on the sick list was 42,058. He speaks of the large number of pension claimants who are unable to furnish accurate data as to time and place of treatment, owing to the long time which has elapsed since the end of the war, and says it is very difficult to adjust such cases. He again mentions the necessity for a new fire-proof building for the Army Medical Museum.

Items.

Alarming Mortality from Cholera in India.—The correspondent of the London *Times* at Darjeeling, India, says the deaths from choleraic fever at Umritser amount to nine thousand, or ten times the nominal rate of mortality for the past few years.

Miraculous Cure.—A lawyer's office was visited by a man who suffered from paralysis of one whole side, and whose motions were distressingly helpless. Something interested his benefactors so much in him as to cause them to watch him from a position of vantage. His paralysis lasted as far as the street corner, where it was miraculously healed by the sight of a saloon.

Sad Effect of Vaccination.—A Boston lover recently gave an affectionate little squeeze of his lady-love's arm. She gave an exclamation of pain, which he thought was resentment. The engagement was broken. She had been vaccinated on the arm. This will add to the argument of a prominent London journalist who insists that vaccination should not be upon the arm.

OBITUARY NOTICES.

DR HAYDEN, OF DUBLIN.

This well known author died October 30th. His extensive monograph on *Diseases of the Heart* was for years the standard work on that subject. He was a devoted student of his profession, and often neglected its profitable practice in order to concentrate his efforts on its exhaustive study.

DR. THOMAS L. CATHCART.

Dr. Cathcart was born July 18, 1807, and died October 28, 1881. He graduated from Dickenson College, Carlisle, at the early age of nineteen years, and was graduated from Jefferson Medical College, Philadelphia, in the Spring of 1830. He successfully practiced his profession in New Bloomfield, Dillsburg, and Shepherdstown, Pennsylvania, altogether for a period of about twenty years: he then engaged in other pursuits in York county, and also at one time held a position for several years in the treasury department at Washington.

The following resolutions were passed by the York County Medical Society:—

First—That we sympathize deeply with the family of Dr. T. L. Cathcart in their great affliction.

Second—That this society mourns the death of one who identified himself with its interests, and continued his membership and regular attendance—with only intermissions caused by sickness—to the close of his life.

Third—Possessed of a warm and generous nature—in the walks of life above reproach, Dr. Cathcart's memory is endeared to all the members of this society, and, indeed, to all who were associated with him in social and professional walk.

Fourth—That we will now proceed to attend his funeral in a body.

Fifth—That copies of these proceedings be sent to the family of our deceased brother, and the same be recorded in the minutes of the society; and also a request that they be published in the papers of our borough, and in the Philadelphia MEDICAL AND SURGICAL REPORTER.

SAM'L J. ROUSE, *Secretary.*

QUERIES AND REPLIES.

Mr. Editor.—Please inform me, through the REPORTER, the usual fee for an attendance upon variolous patients, both in Philadelphia and in country towns, exclusive of mileage. Dr. J. K. E, Pa.

Ans.—We understand that it is not customary, at least in this city and neighborhood, to make any extra charge for attending patients with variola.

Mr. Editor.—Can you give me the mode of preparation of the *solutions of meat* referred to in Ziemssen, Vol. vii, pages 187 and 223, etc.? It seems strange that after highly lauding the preparation repeatedly the author should leave his readers thus delightfully in the dark. An answer direct, or through the REPORTER, will be gratefully acknowledged by your obedient servant. H. E H., M D., Wis.

We shall be glad to receive replies to the above.

Dr. E. P. S., of N. J.—There is no doubt but that Coca is a powerful nerve stimulant. Most of the preparations which have from time to time been offered have, however, proved inert, probably owing to the want of skill in selection or treatment of the plant. That manufactured by Messrs. Parke, Davis & Co., we have reason to believe, is active and satisfactory in results.

Pathologist, Md.—The theory that acute rheumatism is *primarily* a disease of the heart, and that the pericarditis is the prominent and first symptom, while the myositis is second in time and importance, has recently been advanced by Dr. Alexander Harkin, of Scotland. A statement of his views will appear in the *Half Yearly Compendium of Medical Science*, for January, 1882.

Germanic, Mass.—Professor Virchow does not oppose the general theory of evolution; he only says that the Darwinian form of that theory does not apply in pathology; at least, so we understand him.

MARRIAGES.

ARMSTRONG–PATTEN.—In this city, on Thursday morning, November 3 1, 1881, at the North Presbyterian Church, by the Rev. B. L. Agnew, D.D., Dr. Wm. C. Armstrong and Susie A. Patten.

BATES–KEATOR.—On Wednesday evening, November 2d, 1881, at Trinity Chapel, by the Rev. Henry Mottet, Dr. George Fairbanks Bates and Jessie Helen, daughter of the late Jesse G. Keator, both of New York.

BELL–HILLMAN.—On the 26th of October, by Friends' ceremony, at the residence of Israel W. Hart, Norristown, Pa., Dr. Edward H. Bell, of Philadelphia, and Elizabeth K. Hillman, of Camden, N. J.

BIDDLE–BUCKINGHAM.—In Bloomsburg, Pa., October 27th, by Rev. Stuart Mitchell, J. Commodore Biddle, M.D., of Shenandoah, Pa., and Agnes McReynolds Buckingham, of Bloomsburg.

CARR–BLAUVELT.—At the residence of the bride's parents, Hackensack, N J., Tuesday, November 1st, 1881, by the Rev. E. L. Clark, David Cole Carr, M.D., of New York, and Maggie, daughter of C. I. Blauvelt.

DE VRIES–STUBENRAUCH.—In New York, on Sunday, October 30th, at St. John's Church, by the Rev. A. C. Wedekind, Dr. Henry De Vries and Emmy, daughter of A. Stubenrauch, Esq., both of this city.

JACOBS–LUKENS.—On October 18th, by the Rev. J. B. Detrich, Dr. Theodore Jacobs, of Norristown, and Miss Hannah Lukens, of Gwynedd, all of Montgomery county, Pa.

JARVIS–DEANE.—In Claremont, Vt., October 20th, 1881, at the Episcopal church, by Rev. Mr. Hale, Dr. William Jarvis, and Mary B. Deane, both of Claremont.

LINDSAY–WORKMAN.—On Tuesday evening, October 25th, 1881, at the residence of the bride's parents, by Rev. K. Beaver, Dr. C. E. Lindsay and Miss Annie Workman, both of Allegheny city, Pa.

DEATHS.

BACHE.—In Brooklyn, L. I., November 2 1, 1881, Benjamin Franklin Bache, Medical Director U.S Navy, in the eighty-first year of his age.

BRYAN.—In Elizabeth, N. J., November 5th, 1881, Dr. James Bryan, formerly of Philadelphia, aged seventy-one years.

CATHCART.—In York, Pa., October 28th, 1881, Thomas Latimer Cathcart, M.D., son of the late Rev. Robert Cathcart, D.D., aged seventy-four years and three months.

HAHN.—On the 3d, inst., William B. Hahn, M D., of Montgomery county, Pa., aged eighty-two years.

JENKS.—Monday, October 31st, 1881, at his residence, near Shoemakertown, Montgomery county, William F. Jenks, M.D.

O'CONNELL.—In this city, on October 28th, 1881, Dr. M. R. O'Connell.

SMITH.—In New York, suddenly, Francis Asbury Smith, M.D., of No. 422 East 116th street.

VANDEVERE.—In this city, on October 31st, 1881, Dr. J. Robb Vandevere, in the twenty-fifth year of his age.

VAN DOREN.—In New York, on November 2d, 1881, Dr. Matthew D. Van Doren.

YOULIN.—In Jersey City, on Sunday, October 30th, Dr. J. J. Youlin, aged sixty years.

THE

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Communications.

THE MANAGEMENT OF THE PERINEUM IN LABOR.

BY ED. R. STONE, M.D.

Read before the Northern Medical Society of Philadelphia.

I have felt some hesitation in presenting a subject for discussion this evening which may be considered by some of trifling importance, and because it will be necessary for me to say much that is familiar and even trite. But authorities are so conflicting, not only as to how rupture of the perineum may be prevented, but in their appreciation of the importance of the accident as well as of the means of remedying it, that I have thought that it might be well to open the discussion, to draw out the views of those whose experience in obstetrics must be much greater than my own.

In the first place, let us briefly review the anatomy and physiological relation of the perineum, after which we will be able to take up understandingly its relations to labor, to the causes, prevention and cure of rupture.

The perineum is that portion of the integument between the posterior commissure of the vulva and the anal aperture; it forms the base or external surface of the perineal body, the wedge of tissue filling the space caused by the anterior curve of the vagina, and the posterior curve of the rectum. The perineal body varies in size and thickness, following to a certain extent the embonpoint and general muscular development of the woman. It is generally rather more than an inch between the vaginal and anal apertures, and one and a quarter to one and a half inches, measured up the posterior wall of the vagina, where it imperceptibly grades off into the proper wall of that canal. It is composed of muscular, yellow, elastic and fibrous tissues, and is therefore contractile, elastic and resistant. These several tissues meet and are blended together in a central point of support and union, which corresponds with the central tendon of the perineum in the male. Here we have inserted the superficial transverse perineal muscles, which stretch across the pelvis to the rim of the ischia, the anterior attachment of the "sphincter ani," and the posterior attachment of the bulbo-cavernous muscle; and deeper, some of the median fibres of the ischio-coccygeus. In the perineal body, also, the ischio-perineal ligament is attached. This is a strong band of fibrous tissue, which divides laterally the outlet of the pelvis into about two equal portions. It is formed, according to Savage, by the "union of the superficial perineal fascia with the inferior border of the perineal septum." These muscular and fibrous tissues are mingled in the perineal body with considerable yellow, elastic, and the ordinary cellular tissue. Blood vessels from the pubic artery are large and abundant, and the softening and flaccidity of the perineum in labor is chiefly due to its vascularity. The nervous supply comes from the pubic nerve.

The perineal body forms a most important part of the floor of the pelvis. It is one of the most important supports of the vagina, and indirectly of the womb itself, as the position of the latter depends in great part upon the integrity of the vagina. Remove the perineum, and the lower part of the vagina becomes a wide,

open funnel, and prolapse of the anterior or posterior wall, or both, soon followed by a settling down or other displacement of the uterus, is pretty sure to occur. This may or may not go on to a condition of complete procidentia. The muscles and pelvic fascia, which close the orifice of the vagina by lateral traction upon its walls, have lost their point of central support, the tube gapes wide open, and we have added all the evils from contact of air with a mucous membrane not accustomed to its presence. The entrance of air can often be demonstrated by the mortifying explosions which are complained of when a sudden change of position forcibly expels it. The sexual feelings are also blunted, as the bulbo-cavernous muscles can no longer act with vigor upon the clitoris. These evils are not usually experienced very soon after the loss of the perineum, hence I think they are not always properly appreciated by the obstetrician, unless he also turns his attention to gynecology. We should, therefore, listen to the experience of such men as Emmet and Goodell, and it is a significant fact that the former found it necessary to remake the perineum in all but twenty-six out of one hundred and eighty cases of procidentia. In severe cases, with laceration of the sphincter and the lower part of the rectum, the patient's suffering is greatly augmented by incontinence of fæces, making her life a disgusting burden to herself and removing her from the society of her friends.

In labor, the perineum offers the last point of resistance to the emergence of the presenting part, and a nice adaptation of force to resistance is necessary for a happy termination in the fourth stage of the mechanism. In the ordinary presentation of the head the vertex is forced down upon the muscular floor of the pelvis, which rotates it to the front and presses it beneath the pelvic arch; the perineum is distended, forming an elastic splint, carrying out the general curve of the pelvis. Between the downward pressure of the uterus and the forward pressure of the perineum, the head is gradually turned out in a movement of extension around the pubic symphysis; the anterior fontanelle, the brow, the face, and finally the chin, successively appear over the anterior edge of the perineum. If the contraction of the womb and the woman's voluntary efforts are relatively too strong, the head will be forced directly through the perineum, while if the latter resist unduly, the labor will cease until delivery is effected artificially. The shoulders rotate in the same way and are delivered fore and aft, and it must not be forgotten that bad management in their delivery may rupture a perineum which has escaped injury from the passage of the head.

The main causes of rupture may be classed as follows:—

1. Those in the perineum itself, as small size of the vulvar orifice, actual or relative, undue rigidity, or the presence of cicatrices or morbid growths.

2. Causes precipitating delivery, as violent pains and muscular efforts on the part of the patient and the use of ergot. These act by overcoming the normal function of the perineum, and hurrying the delivery before the mother's tissues have had time to dilate sufficiently.

3. Bad positions are frequently causes of rupture, as the birth of the head in extreme flexion, when the vertex is directed posteriorly.

4. Certain deformities of the pelvis which interfere with the normal movements of the presenting vertex, as a straight sacrum, or narrow pubic arch. And last, but not least by any means, the doctor is frequently the cause of the accident through the improper and violent use of the forceps. In the limits of such a paper as this, I cannot stop to enlarge upon many of these causes of laceration, as their proper treatment would occupy too much time. When the danger to the perineum rests in too violent uterine contractions, reinforced, as they usually are, by strong reflex tenesmic efforts, the full influence of an anæsthetic is invaluable. It makes the patient perfectly passive, and has a marked effect, besides, in relieving the spasms of the muscles of the perineum brought about by severe pain. Faulty positions of the head cannot always be rectified, and the perineum is unavoidably torn in the delivery. Such a case occurred to me, where, in a primipara, with the vertex in the hollow of the sacrum, forceps were necessary to sufficiently flex the head, and in spite of the greatest care the perineum was completely lacerated, the wound extending into the rectum. Much could be said for and against the use of the forceps. Their careless use will almost certainly injure the mother's tissues, while in skillful hands they may be made to have the exactly contrary effect.

With the patient thoroughly relaxed and anæsthetized, the head may be safely delivered, where an accident would have surely occurred if the patient had been allowed to use voluntary efforts, which are so apt to spoil all by coming at the most inopportune moment. Sometimes we cannot safely afford to increase the lateral diameter of the head by so much as the blades of the forceps; and then it is a good rule to take the latter

off just before the perineum is passed, and trust to nature's efforts, aided by pressure on the child's face through the rectum.

Can anything be done especially to save the perineum in ordinary cases? I will not detain you with even a catalogue of the various plans which have been suggested. Many of them, like the ancient folded napkin, are worse than useless, because they increase the difficulty and distress by adding outside pressure to the parts already suffering from too much pressure from within, besides drying and overheating the parts. Any good resulting from supporting the perineum in the old way is limited to retarding the delivery of the head and assisting the movements of extension, and this can be better accomplished in another way. Now the perineum is usually torn just where the emergence of the forehead causes the vulvar commissure to slip rapidly back over the face, and it will be found, I think, that it is this backward movement plus the outward bulging which throws too great a strain upon the comparatively inelastic ischio-perineal ligaments which offer the chief resistance to the dilating force. Therefore a method which prevents the slipping back too suddenly of the perineum, while it assists nature in keeping the occiput well applied under the arch of the pubis, in other words, favoring the normal movement of extension, accomplishes, it seems to me, all that can be done to avert accidents. Dr. Goodell's plan of drawing forward the perineum with two fingers in the rectum, while the thumb presses the occiput under the pubic arch, seems to be the best means for this purpose. It offers the additional advantage of leaving the perineum itself undisturbed, and sufficient force can be brought to bear directly upon the occiput to prevent the delivery for an indefinite period. The only objection to this procedure which I have noticed, is that the fingers drawing upon the anus seem to increase somewhat the already violent reflex tenesmic efforts. With incising the labia I have had no experience, as in my cases I have not felt justified in so doing, not being sure that laceration would occur, and occupying my attention with nearer means. Great care should be used in the delivery of the shoulders. If the pause after the birth of the head appears to be jeopardizing the life of the child, the uterus should be smartly rubbed and the woman urged to bear down. This not succeeding, the coccygeal shoulder should be carefully drawn out in the line of Carus' curve, avoiding all unnecessary haste and violence. But in spite of the greatest care, the perineum will be lacerated occasionally, especially in primiparous labors. My limited experience does not bear out the statement that this is most liable to occur in the muscular women of the working classes. On the contrary, my cases have occurred in those whose circumstances have allowed them to live more luxuriously. Like many other difficulties in parturition, it seems to be one of nature's penalties which women have to pay for the comforts of advancing civilization.

How are we to know that the perineum has been torn? This would seem to be a superfluous question, were it not certain that the accident is frequently overlooked until, perhaps, the contact of the urine with the raw surface causes the woman to complain of pain and smarting. I do not know how far the injunction to perform the various obstetrical manipulations under cover of the sheet is generally carried out, but for my part, I generally see the progress of the fœtus through the vulva, and can note any damage to the mother's tissue. Nor can I see any impropriety in inspecting the parts after the placenta is removed, and the woman ready to be made comfortable. The eye, however, is not always sufficient. In a case of a primipara, whose labor progressed normally, the head passed the perineum without as much as turning the fourchette, and I was pleased to believe that the tissue had escaped all harm; but in a few days, in searching for the cause of soreness and smarting in passing water, the perineal body was found to have been lacerated completely, while the integument escaped. It is a good rule, therefore, to pass the index finger into the rectum and the thumb into the vagina, when the amount of the perineal body remaining can be accurately determined.

What shall be done, when the perineum has been lacerated? If the rupture is complete, that is, involving the sphincter ani, all are agreed that sutures will probably be necessary, not only to rebuild the floor of the pelvis, but to save the womb. Even such a severe injury has been known, however, to heal spontaneously. Hoping for this happy but rare termination, and believing that the operation can be better done afterwards, Cazeaux offers the somewhat strange advice, that nothing should be done until after the woman has menstruated. I do not know to what extent French ladies delegate the care of their infants to wet nurses, but if lactation follows in the usual course, this would postpone the operation for about a year or more, during which time the patient would be subject to all the miseries of an uncontrollable rectum. Besides, I do not be-

lieve that the surfaces can be generally so accurately freshened after cicatrization, as to give the same prospect of good union as in the primary operation. But this severe grade of injury is, fortunately, comparatively rare; the form most commonly noticed is the incomplete rupture, involving more or less of the perineal body, but leaving the sphincter ani intact. In treatment, many good authorities advise you to bind the knees together and leave the rest to nature, hoping that union by first intention will take place. I do not know what the experience of others may be, but I have looked in vain for this happy result in cases involving to any extent the perineal body, and I think the reason is plain. The rupture has divided the central support of muscular and fibrous tissues, which will inevitably separate and retract, unless they are held together by more efficient means than a napkin around the knees. The wound gapes, and after days, even weeks, of pain and discomfort, finally heals by cicatrization. But there are those who say that this healing is sufficient for health and comfort. It undoubtedly leaves the vulvar orifice so wide open that subsequent deliveries are not from this cause impeded, but the cause of prolapse of vagina and womb in after years point to a different moral.

Even if no prolapse of vagina or uterus follows—and undoubtedly many women with lacerated perinei go through life without suffering from displacement due to this cause—it has been well demonstrated that many nervous symptoms are due simply to the irritation of the nerves involved in the cicatrized tissue of the perineum, when that tissue has been allowed to heal by granulation. Moreover, for the comfort of the patient and the speedy healing of the wound, it is, in my opinion, worth while to close it. The objection urged, that the track of the sutures may offer surface for the absorption of septic poison, is idle, for the sutures close a surface many times greater, through which the system would be much more apt to become infected.

Good authorities have stated that their experience with the primary operation has been disappointing, that the puerperal state, the lochial discharge, etc., have prevented union, and caused the operation to fail. If this were the universal testimony, it should certainly deter us from operating until the lying-in period is over. But many of those best able to advise us, testify otherwise. I feel diffident in offering my very little experience, which only extends to nine cases. In not one of these, however, did primary union entirely fail; in two, a part of the surface failed to unite, but a sufficient groundwork was secured to make good perinei. In the others the result was perfect. In those cases where the sutures are cut out before union takes place, we have a right to suspect that they have not been properly placed. A suture which has been inserted deeply enough to embrace in its grasp the entire rent *cannot* be cut out in any reasonable period.

I would, therefore urge, that in cases where the rupture involves the deeper structures of the perineal body, the wound should be carefully united, and the result will, in all probability, be satisfactory. Any objection to the operation based upon a desire not to call attention to an accident which may be attributed to an over bad management, is not worthy of the conscientious physician. The temptation is great, however, to leave in peace a patient worn out with sore travail, but this should not weigh against our responsibility to do our whole duty for her future happiness and comfort.

In performing the operation, a medium-sized curved needle (it is better without the lance point, which unnecessarily wounds the tissues), silver or good iron wire, a pair of scissors, a clean sponge, or absorbent cotton, a basin of water, two assistants, and good light, is all that is needed. The patient is laid on her back with the buttocks on the edge of the bed, while assistants seated on either side receive the feet in their laps and support the knees. If an anæsthetic has been used in the labor it may now be readministered, although the pain is not severe, the parts being benumbed and bruised. The parts are carefully cleansed from blood. Bleeding is almost never troublesome, as the wound is lacerated and in the median line, where the vessels are small. If the discharge from the womb is free, a tampon may be placed in the vagina until the sutures are inserted, and removed before the latter are twisted. The needle should be introduced well back from the wound, and made to reach the very bottom of the laceration, while the one nearest the vulva is made to take in the vaginal mucous membrane a short distance above the rest. This will drive down the vaginal mucous membrane to cover the wound and prevent the discharges from finding their way behind the sutures. If the sutures are not carried deep enough, the union will not be complete, a pocket being left behind them, which will have to heal by granulation. After a sufficient number of wires have been introduced, they should be tightened by twisting in the same order as they were introduced, that is, beginning with the upper

one. It will be convenient, in facilitating their removal, to leave the twisted ends fastened together at their extremities, projecting for an inch and a half or two inches, as recommended by Dr. Emmet. In this way the position of the sutures is evident to the nurse, and they can be readily avoided in the necessary brushing and anointing of the parts, and the long end facilitating their removal. After the completion of this simple operation, a towel should be pinned around the knees to prevent accident. In the after treatment very little is necessary. At first I deemed it necessary to draw the urine with the catheter, but I am satisfied now that it is useless, the contact of freshly voided urine not seeming to do any harm.

If the rectum has not been involved, I would not attempt to prevent the natural movement of the bowels, as I have not seen any injury result. If the nurse is sufficiently trustworthy, I would direct the use of a solution of permanganate of potassa, three times daily, as vaginal injection. This will prevent the retention of any decomposed urine or lochia, and it is a comfort to any patient after delivery. The sutures may be left five to seven days, and their proper removal requires some little tact and delicacy. The twisted ends are separated by cutting the wire uniting them, and in turn each loop is divided, using the long end as a guide for the scissors. They are then seized with forceps and turned out in the curve which the wire has taken. Efforts to pull them out in a straight line causes much pain, and may endanger the union of the part. It is scarcely necessary to say, that until the union is perfect, the bed-pan should be used. The last patient upon whom I operated walked across the room from the bed to the commode, which performance, however, did not compromise the result; but I would not recommend such feats as a general rule. In these brief hints at the details of the operation, I do not wish to be understood as claiming that they are better than any others; they simply illustrate my own plan, and undoubtedly in other hands, the operation has been equally successful. In conclusion, I cannot help urging a reconsideration of a question which has been too hastily passed over, I think, as one of slight importance. When we consider how many of the ailments of women have their origin in the critical period of childbirth, it behooves us, as their guardians at that time, to do all in our power to bring them through unharmed, and slight nothing which may bear upon their future comfort and happiness.

Philadelphia, Oct. 11th, 1881.

THE TREATMENT OF HYDROCELE.

BY J. S. WIGHT, M.D.,

Professor of Surgery at the Long Island College Hospital, Brooklyn, N. Y.

In order to obliterate the sac of the tunica vaginalis testis in a case of hydrocele, for a number of years I have been in the habit of performing the following operation:—

After the administration of an anæsthetic, the sac is penetrated in front, near the lower part, by a long curved bistoury, whose point is brought out of the sac in front near the upper part, making two openings in the front wall of the scrotum, through which the hydrocele fluid can be evacuated, while the bistoury is uniting them into one general anterior opening into the sac. This operation is very rapidly and easily done, and it is not often that a blood vessel has to be ligated.

The testicle is carefully examined: It is left in place if healthy, and removed, if it is diseased, so as to make such procedure necessary. And, if, as I have sometimes seen, there is gelatinous fibroid material about the testicle, it is carefully removed with a pair of scissors. The opened cavity may be washed out with a two per cent. carbol. solution, and then packed with oakum containing carbolized oil, which can be kept in place by a proper bandage. This oakum must be left in for two or three days, or until more or less suppuration takes place, so that it can be removed easily without injury to the young granulation tissue, and without causing any bleeding. After this the wound of operation may be dressed with oakum, carbolized or not, from day to day, the waste products being carefully removed, till scar tissue is formed, and the sac is obliterated, which generally occurs in a few days.

This operation has a number of advantages; for instance:—

1st. A patient having the above operation performed on him, is sure to have a radical cure.

2d. It is one of the safest operations I have ever performed. All the cases I have ever operated on have not had any unpleasant symptoms, but have done well. I am inclined to consider this method of the radical cure of hydrocele as safer than any method of radical cure by injecting the sac with an irritating fluid in order to cause inflammation and adhesion. In operating by injection, I have found the general disturbance at times very marked, and have had to open the sac by a free incision, just as it is necessary to open an abscess. In such a case the free opening had better have been made in the first place.

3d. It is a fact that open wounds properly treated do well, since there is an unobstructed exit for waste products, and less infiltration and tension on the tissues. The wound of the above operation is treated openly, and theoretically and practically does well, as I have always found.

4th. One of the most important advantages in this plan of treatment consists in the fact that a testicle may be so diseased as to require removal, and that it can be readily found out, when there can be a complete inspection of the organ after being laid bare. Any one can see the perils of acute inflammation in the serous and peri-serous tissues around a diseased testicle. I have more than once been obliged to remove a diseased testicle, after having performed the operation for radical cure of hydrocele by incision. In such an event the patient has to submit to only one operation, and that a comparatively safe one.

5th. The patient suffers less pain during the repair of the scrotal tissues after this radical operation, than during the inflammation following an injection operation due to the tension of infiltration—plastic or purulent. My attention was called to this point in a forcible manner by the following case: A man about sixty years of age, and whose health was not very good, had a hydrocele tapped by me with an exploring needle—the hydrocele fluid escaping slowly along the groove of the needle; acute inflammation supervened, and brought about a radical cure; but the pain was very great, causing my patient extreme suffering, and putting him in imminent peril.

I have treated other sacs, such as the pre-patellar bursa, and the compound ganglion of the flexor and extensor tendons of the wrist, in a similar manner, with gratifying results. I have reported two cases of compound ganglion of the wrist treated on this plan. To this I add the following case: In the month of June, 1881, I operated on a case of compound ganglion of the sheath of the common extensor, and the extensor indicis of the right wrist of a lady who had an unsuccessful operation performed at a previous time. I made two openings and completely evacuated the fluid and the fibroid bodies from the sac, washing out the sac with a strong carbol. solution. This patient has quite completely recovered, the sac being obliterated and largely absorbed. The motion of the parts appears to be as good as ever. This was a patient of Dr. J. C. Snively, who carried out the after treatment.

There is, however, one point of difference in the treatment of these compound ganglia as compared with that of hydrocele. In order to save the integument and make the scar tissue as small as possible, two openings are made into the sac of the compound ganglion, while in the sac of hydrocele one large opening is made. Also, in the case of an operation for radical cure of compound ganglia, that is, during the after treatment, it is important to keep up constant and careful passive motion, in order that the structures may have as little loss as possible, when the patient comes to use the limb.

In fine, so well am I satisfied with the above plan of treating hydrocele after some years of experience, that I do not contemplate the carrying out of any other plan. At the same time I do not condemn the plan of treatment by injection.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF PROF. H. B. SANDS.

Necrosis of the Lower Jaw.

Case 1.—This little girl, gentlemen, is four and a half years old. She is brought here with a large swelling of the left side of her face. The present trouble has lasted for six months, and the first sign of it noticed was a slight swelling of the same side of her face. The doctor under whose care she has been, tells us that there has been a discharge of hard, stringy pus from an opening inside of the mouth; he has probed this opening, but made no particular discovery. Two weeks ago redness was noticed in the swelling; it exists now, you observe; it was attended by pain.

This may be an abscess, or it may be a morbid growth, and we must make a thorough examination of the tumor, both externally and by the mouth. Before doing so, however, I shall put the child under ether. for it is useless to make the attempt otherwise. The child, then, being etherized, we examine the tumor externally, and find a point of rupturing, which gives the sense of fluctuation. The situation, however, does not positively indicate the presence of pus. Within the mouth I see pus exuding from an orifice. I pass a grooved director into a long tract without difficulty, until the instrument touches bone, when I get a grating sensation. I now pass a narrow bladed knife along the director in order to let out the matter. Examination of the bone now, with the finger, discloses the presence of loose bone at the end of the sinus; after extracting the dead bone, the surface of the bone is smooth, and I am confident that all of the dead bone is removed.

The child will now recover. If any pieces of bone have been left behind in the wound, they will be washed out by the syringe. We keep the mouth clean with salt water, to which, for antiseptic purposes, a little Labarraque's solution may

be added. This is the simple treatment. The swelling will subside; the child will recover. Had the dead bone been allowed to remain when we found it, she would have been sick indefinitely.

Commencing Caries of the Cervical Vertebræ.

CASE 2.—This boy is eight years old. The mother has been healthy and all the other children are healthy. Three weeks ago the patient received a blow upon the right side of his lower jaw. Almost immediately he began to have stiff neck; there was also swelling of the neck, just under the jaw. At present, you observe, the child turns his head to the left side, and holds it rigidly in that position. He cannot turn his head to the right, for it pains him to attempt the movement.

We examine the jaw first, and find it intact: there has been no fracture; there is no severe contusion now; the bone seems to be healthy. Underneath the jaw is a prominence due to the existence of a firm, hard, nucleated swelling, which I appreciate as a swollen lymphatic gland.

The malposition of the head is not accounted for by the history given. It is possible that simultaneously with the other injury, he received a blow upon the neck. Or he may have been on the eve of having something about to produce the malposition when he was injured. It is possible that it is a case of torticollis. Persons are liable to wry-neck just as they are to talipes. A muscle of the neck may contract, just as the muscles of the leg contract to give us the various forms of club-foot. And in the case before you, it is possible that the sterno mastoid muscle of the right side may be contracted to produce the abnormal position of the head, which you see is marked. We must, therefore, examine the condition of the muscle. We do so, and find that it is in a state of entire relaxation, and, of course, it does not produce the deformity.

The change of position may be due to division of the cervical vertebræ, *i. e.* to caries of the vertebrae. That is not an infrequent cause of this malposition of the head. Before the clinic I made a slight examination of the vertebræ of the neck through the mouth, with my finger. I found, however, no evidence of disorder of the bones. But that is a negative sign, for malposition of the head may take place before there are any physical signs of division of the bones. We must further examine the spinous processes of the vertebræ. If disease exist of the nature which we suspect, there will be tenderness of the spinous process. We look for tenderness before we expect to find deformity. In this case we find marked tenderness over the spinous process of the fourth cervical vertebra.

My suspicion is, that the boy has commencing inflammation of the cervical vertebræ. I am not certain that caries exist here, however. Inflammation of the fibrous structures external to the spinal canal might cause this trouble. Only one other cause occurs to me now: namely, contraction of the splenius colli muscle. The patient may be suffering from contraction of the splenius colli muscle of the left side, which may have been caused by injury to the nerve, due to the accident.

We prescribe some liniment for this case: something to relieve the pain. In time the symptoms will become more marked and enable us to be more certain in our diagnosis. Considering that the malposition of the boy's head may be due to caries of the vertebræ, it is improper to use force for the purpose of restoring the head to the normal position. I have known great harm to come from force used in cases of wry neck, supposed to be due to contraction of the sterno-cleido-mastoid muscle, which was really owing to existing caries of the vertebræ. We give the patient a belladonna liniment or a soap liniment containing chloroform and laudanum. If the case prove to be one of chronic inflammation of the fibrous structure of the neck, we should apply something stronger. We could then use compound liniment of ammonia, or fly blisters, or the actual cautery.

Dactylitis Syphilitica.

CASE 3.—This little child, gentlemen, has marked swelling of the proximal phalanx of the ring finger. The swelling is painful and evidently deep-seated. Such cases in children are rare, and when they occur, are often due to constitutional syphilis. One way to make a diagnosis of syphilis, is to treat the patient for syphilis, and if he improves under such a course of medication, we may be certain that the diagnosis was correct. The patient before you has already been put upon the iodide of potassium, and manifests signs of improvement. We have every reason, therefore, to believe that this is a case of dactylitis syphilitica.

If iodide of potassium alone should fail, you may combine with it some mercurial, as the biniodide of mercury for example. For such a child as this (six or seven years old), the dose of the biniodide would be from one-fifth to one-sixth of a grain.

Anchylosis of the Last Joint of Thumb.

CASE 4.—This man cut his left thumb on a circular saw one year ago. The wound exposed the bone, opened the joints, and probably cut across the flexor tendons. The inflammation following resulted in producing anchylosis of the last phalangeal joint, which is now perfectly useless. There is no movement in it. There never is movement in joints which are truly anchylosed; in cases of false anchylosis, however, there may be some movement.

Necrosis of Bones of the Little Finger.

CASE 5.—Injuries about the hand are common enough among the laboring classes. This man injured his hand in a machine some time ago. The first joint of the finger was broken and the soft parts were badly lacerated. You observe here that the soft parts are swollen and have not healed. You will guess at once that the bone is diseased; that the presence of dead bone causes the morbid state of the finger. We examine the swelling more closely and find the opening of a sinus. We may discover the presence of dead bone in one of two ways, either by rubbing the bones together, or by probing the sinus. There is dead bone in this finger.

It is not necessary to remove the finger in this case, and unless it is necessary to do so, we never amputate any portion of the hand. Surgery in

such regions should be as conservative as possible. We lay the part open along the sinus, expose the bone, and cut away the diseased portions with the bone-forceps. It is better that you should do this with a short-bladed forceps, for they cut more neatly than long-bladed instruments. It is possible that you may get motion in the joint after such an operation as this, for the ends of the bones may be sufficiently far apart to prevent the occurrence of anchylosis.

Lipoma.

CASE 6.—This woman has a tumor in her right shoulder. The feeling reveals that it is a lipoma, a fatty tumor in the subcutaneous connective tissue. The only remedy is removal of the tumor. It is not worth while to attempt any other means of cure. But it is not always expedient to remove these tumors. If they are small and are not situated on a visible part, and if they give no trouble to the patient, I should not advise an operation. If they are growing rapidly, or if they are of large size already, it is best to amputate them.

MEDICAL SOCIETIES.

THIRD CONGRESSIONAL DISTRICT, INDIANA MEDICAL SOCIETY.

SEVENTH SEMI-ANNUAL MEETING.

Reported for the MED. AND SURG. REPORTER.

The association was called to order Nov. 7th, at New Albany, by Dr. E. P. Early, President, and after reading and adoption of minutes, the regular reports of the members began.

The first paper read was by Dr. J. L. Stewart, on therapeutics. Dr. Stewart, after devoting considerable space in disparaging the prevailing skepticism on the subject of the efficacy of remedies used in medicine, strongly advocated the trial of new remedies, before a verdict is pronounced upon their efficiency. He denounced the expectant plan of treatment as founded upon a fraudulent principle, and claimed for the science of therapeutics, an advance equal to what has been made in the kindred sciences of physiology and chemistry. If not in the discovery of new remedies, then in the reduction of the old to active principles and the application to different conditions by other methods than those with which we were formerly familiar.

From his own experience Dr. Stewart advanced the following opinions:—

"Grindelia robusta, I have found useful in asthma, bronchitis, and like affections; jaborandi is a good diuretic, diaphoretic and sialagogue; yerba santa proves to be of value in diseases of the mucous membranes; cascara sagrada I esteem of undoubted merit as a tonic to the stomach and bowels. In my hands, in several cases of atonic dyspepsia and constipation, it has given prompt benefit. Experience has convinced me too that not all the preparations in the market can be relied upon, and results have been secured sometimes only after repeated trials of different manufacturers' preparations. Damiana as a tonic to the procreative organs, is, in my opinion, of real value. I will cite a case which is at least corroborative.

"Mr. O. and his wife, a gentleman and lady of intelligence and worth, after four years of unfruitful married life, sought my aid to secure an heir. After tracing the difficulty, as I believed, to the wife, I gave her, three times a day, a tablespoonful of the following:—

℞. Fl. ext. damianæ,
Tr. cincho. comp. āā ℥iv. M.

Within two months conception occurred, which resulted in the birth of a fine daughter.

"I venture to say that the remedies of which I have spoken, and many others at present before us, are not sufficiently employed to establish their character; therefore, in their behalf I submit as a motto, 'a trial before a verdict.'

"Our most reliable agents at the present time have undergone many variations in the scale of favor and disfavor with the profession, to be finally adopted by the great mass of intelligent men. Many others, after long application to particular states, have been found to possess attributes that make them serviceable to conditions different from those to which they were originally applied. Ergot, as a single example long looked upon as a stimulant to contract the gravid uterus, is now, in other important pathological states, a most reliable agent.

"May we not by persistent experiment and application, develop new qualities of other agents now in our hands, and thus add something of benefit to the profession in which we *labor?*"

Dr. Stewart was followed by Dr. R. S. Rutherford, member of the same committee, with a paper on the action of some well known remedies.

Dr. Rutherford's experience leads him to believe that carbonate of ammonia does not possess a stimulant action sufficient to justify what has been claimed for it by authorities. Hence, where he once relied upon it and alcohol for stimulation in the crisis of pneumonia, he now resorts to a combination of the carbonate with tincture of nux vomica and tincture of digitalis, this for the reason that nux vomica stimulates the respiratory centres, supports the absorbent powers of the stomach when they flag, and in this way serves to prevent nausea and the accumulation of fluids which otherwise occurs, while the digitalis adds strength to the circulatory system.

Carbonate of ammonia he uses for two reasons: first, because it possesses in a small degree stimulant properties; second, to be able to say, provided counsel should be called, that he is giving carbonate of ammonia.

Dr. Rutherford's report was followed by one from Dr. N. Field, who would have every drug possessing poisonous properties excluded from the pharmacopœia *for the reason given!*

Some complications presented by other members of the Society on gynecological subjects, etc., were presented for consideration, which proved useful by consuming the time until the middle of the afternoon session.

Dr. M. F. Coomes, of Louisville, then read a paper entitled *Ophthalmic Aphorisms*, advocating the immediate removal of foreign bodies from the cornea, or any portion of the globe, if they be accessible. Especially should immediate surgical interference be made in cases of bodies lodged in

the cornea, as their presence, if long continued, gives rise to permanent injury to the structures by leaving a cicatricial opacity. If the lid be injured in such a manner as to cause a gaping wound, its edges should be opposed and retained by silk sutures, which may be permitted to remain from forty-eight to seventy-two hours, or until they cut out, if necessary.

In cases of wounds of the cornea, which allow the iris to protrude, the portion prolapsed should be removed, if it cannot be replaced by manipulation.

The sooner this be done, the better the chances will be for a speedy recovery, because retraction of the iris will occur more promptly than if it be left in this abnormal situation twelve or twenty-four hours. In performing the manipulation necessary to replace a prolapsed iris, the greatest care should be exercised, lest the lens or its capsule should be injured, in which event, cataract is almost certain to result. A small blunt probe, or an ordinary strabismus hook, is probably the most convenient instrument with which to do this.

When the globe is wounded to such an extent as to render it a question of doubt as to whether it should be removed, the following points may serve as a guide in determining the surgeon's proceedings:—

Should the globe have been evacuated of its contents to such a degree as to render it unfit for visual purposes, it is evident it should be removed within the first twelve hours after injury, for the reason that the effusion of lymph and consequent adhesions are not present at that early period, and the globe is also at this time less sensitive.

It matters not how severe the injury may be, if no foreign body has gained entrance into the globe, and the patient is able to distinguish light from darkness, removal of the eye should not be attempted. In such cases the treatment will be governed by the complications of the wound and its extent and location. If it be a wound of the cornea and the iris prolapse, cut it off, if attempts to return it have failed. If the wound should extend through the cornea and portions of the sclera, and at the same time be so extensive as to allow its edges to gape, it should be united by sutures, atropia dropped into the eye, and a cold compress applied.

In this connection a case was related as illustrative of the practice: J. H., aged twenty-three, single, bartender, in opening some mineral water bottles, broke one, a piece of which cut through the lower lid in the direction of the perpendicular axis of the lobe, entered the sclera about a line and a half from the inferior sclero-corneal junction, from which point an incised wound extended through the cornea and into the sclera, about two lines beyond the superior corneal junction. The scleral edges were opposed by sutures, the wound in the lid brought together in the same manner, atropia dropped into the eye and cold compresses applied. Three weeks after the injury was received the individual was able to distinguish colors, and at the present time (six weeks from date of injury) has a cataract nearly ready for removal. In cases where the rent in the cornea or sclera is small and unattended by hernia, atropia drops and a compress will be all that is necessary, until the wound is healed, when the bandage may be removed.

When a foreign body is lodged in the vitreous, and the fact is ascertained immediately after the injury, then is the most propitious time for its removal, or enucleation of the globe, as the pain and other unpleasant complications are thereby avoided. If it be ascertained that the body cannot be removed without destruction of the eye for visual purposes, enucleation is, probably, the best thing to be done.

If the body should be a piece of copper, or any of its alloys, its immediate removal, or enucleation of the globe is demanded. On the other hand, a small piece of steel may remain attached to the posterior surface of the lens, or its capsule, for a great length of time, three years, or more, without causing any disturbance beyond the production of cataract.

When the lachrymal sac becomes the seat of inflammation, followed by an accumulation of pus, it should be opened by slitting up the canaliculus, or at all events opened by making the cut directly down through the margin of the lid, for if it be opened on the face, it will result in lachrymal fistula, which will be difficult to cure; and even if this be accomplished, an unsightly scar will remain.

In the treatment of purulent conjunctivitis from whatever cause, the chief point is to keep the eyes perfectly clean, never allowing the secretions to accumulate beneath the lids. To accomplish this end, the eyes must be cleansed every twenty or thirty minutes with a solution of common salt, muriate of ammonia, bromide of potassium, or some similar agent, which has the power of dissolving the mucus and liberating the pus. The solutions mentioned may vary in strength from five grains to the ounce to a saturated solution. The parts having been freed from all accumulations, a mild astringent should be dropped into the eyes, such as weak solutions of alum, sulphate of copper, carbolic acid, tannic acid of from one to five grains of each to the ounce of water.

In the event of chemosis so great as to render it impossible to work the lids or open the eyes, the conjunctiva should be snipped in several places in order to allow the affected serum to escape. Should this fail to accomplish the desired end, viz., the necessary freedom of the lids, tarsoraphy should be performed, that is, the external canthus should be extended sufficiently to allow the pus to be washed from the conjunctival surface.

The three chief therapeutic agents in the treatment of iritis, are: atropia to relieve pain and prevent adhesions between the iris and lens or cornea; iodide of potassium internally as an absorbent and resolvent, with cantharidal collodion, or tincture iodine applied to the forehead as counter-irritants.

As a rule all cases of cataract occurring in persons under twenty-five years of age, may be removed by absorption, while extraction will be found necessary in all cases of senile cataract. Couching should not be practiced under any circumstances.

Care should be taken in discission not to make

too much of a rent in the lens, lest violent phakitis result.

The three leading features, as points of diagnosis in glaucoma, are abnormal tension of the globe, limitation of the visual field, and a cupped disc.

In glaucoma fulminans there is always severe pain in the eye, with unremitting headache.

Cases of glaucoma never recover without surgical aid. Iridectomy is the remedy.

Irido-cyclitis is usually chronic in character, frequently the result of syphilis or the sequela of some other disease, iritis or choroiditis. Medicines may palliate, but it is a question if anything but iridectomy insures permanent relief.

As a rule, cases of phlyctenular ophthalmia are dependent upon struma or malaria, or are rather to be considered as a sequel of these diseases. Hence, quinine and the iodides must be administered freely, if we would expect a speedy recovery. If the pain is severe, atropia should be applied locally. An ointment composed of ten grains of the yellow oxide of mercury and one ounce of glycer-amyl, will be found a very efficient local application. In most cases the nasal mucous membrane will be found in an irritable and diseased condition, which will be much benefited by the application of the ointment mentioned.

In cases of corneal ulceration, where perforation is apparently unavoidable, paracentesis should be performed without hesitation, because it can do no harm, and may save the eye from destruction. The puncture should be made in the deepest portion of the ulcer, and the needle or knife withdrawn slowly, so as to prevent a sudden evacuation of the aqueous humor. If the ulcer be near the periphery keep the pupil contracted, and if near the centre keep it dilated.

Following Dr. Coomes, came Dr. Joseph M. Mathews, who, owing to the fact that he had been selected to deliver a popular address in the evening, presented no paper, but made the following remarks on

Hints in Operating for Fistula in Ano.

Very much of the failure to cure rectal disease, I imagine, is due to wrong impressions as to the cause and nature of the same. Authorities have differed upon the subject of the pathology of fistula, even from the very first who wrote of the disease. Brodie taught that it always originated from ulceration of the gut, and that, therefore, there always existed an internal opening from the first. Syme taught that the mucous membrane was always intact at the beginning of the trouble, and only developed when suppuration existed. The fact is, that both men were wrong. A foreign body may be the starting cause of a fistula either from the inside of the rectum, or from without. There can exist internal openings without any ulceration of the mucous membrane.

In giving any "hints" on the operation for this trouble, I of course, mean to speak of patients who suffer from no special diathesis or other trouble, which might form a complication or contraindication to operation.

There are four methods of operating:—

1st. Injecting the sinus.

2d. The silk ligature.

3d. The elastic ligature.

4th. The knife.

I speak of the injection of the sinus as a mode, from the fact, that it is yet practiced by the empirics to a great extent. This is done, no doubt, to save the feelings of the patient, who may object to the use of the knife, caustic(?) or ligature.

In operating upon a recent fistula, where no induration of the tissues exists, I have no doubt but that some good can be done by employing injections of silver nitrate, iodine, etc., in the tract, especially if the condition be sluggish and shows no disposition to heal. To say that the adoption of it is advisable in fistula of any length of standing is simply folly. Irritation sufficient to close up the external opening might be excited, but this, in nine cases out of ten, is just what is not wanted. To effect this much is not curing the disease, and no surgeon will risk his reputation in this manner.

2. The use of the silk ligature is still in vogue, especially among the older members of the profession. It has its advantages, and in some cases we cannot afford to ignore its use. In cases where any special diathesis exists, say scrofulosis, or tuberculosis, and the use of the knife is contraindicated for fear of incontinence, hemorrhage, pain, etc., this can be said to be a very proper, if not satisfactory mode of operation. Patients dread the use of the knife. This mode overcomes their objections, and is comparatively free from pain; another advantage being that they can be kept out of bed and at their usual avocations. The method of applying it is simple, it being simply to thread a small flexible probe, pass it through the external opening into the bowel, thence out at the anus, and tie a little firmly, but not tight. It is re-tied every few days, according to circumstances. If only one sinus exist, a cure may be effected. If the disease has existed for any length of time, or the tract be callous, the operation will be ineffectual.

3. The elastic ligature is highly lauded by some, but to say that it can be successfully used indiscriminately, and that to the exclusion of the knife, is saying something that cannot be supported by facts. This mode of operating has its advantages, yet it has likewise its disadvantages. To state briefly, its advantages are, viz.: It does away with the horror of the knife; it is not attended by hemorrhage: it can be used sometimes without chloroform; it causes less pain, if not drawn tightly, and the patient can usually go about during the treatment. Its disadvantages are, if the sinus is callous it will not cure the disease; if according to all authorities the ligature is drawn tightly the pain is intense, it delays the cure very many days, from the fact that it takes from eight days to three weeks to cut out; if the disease has existed for any length of time its use is contraindicated.

4. The knife is undoubtedly to be preferred to all other methods in the great majority of cases. No surgeon should succumb to the whims of his patients, if in so doing he violates his own judgment. Therefore a patient should never be allowed to dictate an operation or how to perform it. The great majority of cases of fistula in ano are not seen until after they have existed for

some time. We all know that if this be true the great majority of them have callous tracts.

If you use injections you only close up the external opening. If you use the ligature, either silk or elastic, you cut through the top and not the bottom, which it is your duty to do, the consequence being, that you do no good, the sinus opening again in a little time. If you use the knife, you cut through both the top and bottom of the sinus and you cure your patients. If other sinuses exist beside the main one, you lay them all open and the patient gets well. If you use the ligature, you cannot see the sinuses and your patient does not get well. If you use the knife and the edges of the wound need trimming, you can trim them. If you use the ligature no such opportunity is afforded. The old authorities used to talk about cutting out a fistula. The laity have such an impression now, and I tell you, gentlemen, there is more good surgery than poetry in the idea. The more you cut these patients the better they do, and if I could not get rid of a callous sinus any other way, I would not hesitate to cut it out.

As to the employment of chloroform in operating, I would say, that I prefer to use it in most cases, for the reason, not only that it relieves the patient from the pain, but also because it permits the operator to cut as much as he sees proper.

NORTHERN MEDICAL SOCIETY, PHILADELPHIA.

Dr. E. R. Stone read a paper upon

The Management of the Perineum in Labor.

(*See page* 617.)

Dr. Montgomery commended the completeness of the paper, and said every obstetrician should go to attend every case of labor prepared to sew up the perineum should it rupture.

The discrepancy in the statistics given by different physicians regarding the relative frequency of its occurrence, he believed to be due to the lack of a thorough examination after labor, as the perineal body might be badly lacerated, while the exterior skin remained intact, or nearly so.

He gave as predisposing causes, the position of the vulvar orifice, fatty degeneration of the perineal body, and rupture of the os uteri, followed by sudden impinging of the head. He thinks the forceps increase the amount of stretching required for the passage of the head, and, therefore, recommends their removal, especially in primipara, before its delivery, when, with two fingers in the rectum, the head could be pressed forward without this increase.

He is not in the habit of incising the labia, believing that the posterior wound will heal easier than the two lateral ones.

After rupture had taken place, he would use serrefines for uniting the parts, if the rent was superficial only; if deeper, the ordinary sutures, placing them at once, as the pain of introducing them is then less than at any later time.

Union always takes place unless puerperal inflammation follows. He uses hot water to control the hemorrhage, had the bowels moved daily, and did *not* use the catheter.

Dr. Oliver had seen one case in which the sutures were removed on the second day, on account of puerperal peritonitis.

After recovery of the patient, he was surprised to find the perineal wound healed.

Dr. Updegrove had very few cases of rupture. Inquired the proportion of cases in which the forceps had been used.

Dr. Campbell had ruptured the perineum twice by instruments. The first was a case requiring great haste in delivery, because of the presence of convulsions. The second was the result of a monstrous head; all his other cases of rupture took place without instrumental assistance. He thought the forceps a help in preventing the accident.

Dr. Walker said his experience did not agree with the common statement, that the accident was confined to the wealthier classes with weak muscles; his worst case was in the person of a danseuse, who had a most unusual muscular development of these parts.

He believed the most frequent cause of rupture was the too early extension of the chin before the vertex was fully born. He places two fingers in the rectum, and keeping the chin flexed, carries the whole head forward, until the neck is well under the arch of the pubes, thus changing the diameter as it passes the vulva from five to three and a half inches. He has never incised the labia.

Dr. McDowell usually places the finger in the rectum at this stage of labor, and then with the other hand on the occiput forces it down and to one side. He also gives the same motion to the shoulders as they pass.

He believes that the position of the woman has much to do in producing this rupture. The easiest position for the woman, and the one least liable to this accident was that of kneeling, although that necessitated a constrained and tiresome position for the doctor.

The nicking of the labia he believed to be a valuable operation, and one in which he had a very large experience. He now made the incision low down, just at the edge of the perineal body. He incised the mucous membrane only, and found that a very small nick was all that is necessary.

It is best done by scissors or a dull knife. He had never had any troublesome hemorrhages or difficulty following the operation.

Dr. Stone, in reply to Dr. Updegrove said, that a majority of his cases were instrumental labors, but that the rupture was not due to the forceps, since they had been removed before the passage of the head over the perineum.

He believed that the usual cause was the extreme bearing down of the woman at the time; and since this was chiefly a reflex act, and beyond her control, our only remedy was in the use of ether.

In reply to Dr. Walker he did not believe that extension could take place before the vertex had completely passed from under the pubes.

—"Are you feeling very ill? let me see your tongue, please." It's no use, doctor; no tongue can tell how bad I feel."—*Boston Transcript.*

EDITORIAL DEPARTMENT.

PERISCOPE.

The Chinese Opium Pipe as a Therapeutic Agent.

In an exhaustive article on this subject, published in the *Medical Record*, November 5th, 1881, Dr. H. H. Kane, of New York, points out the following advantages, which smoking offers over other methods of using the drug:—

First.—It takes longer to form the habit.

Second.— It works less harm when once formed.

Third.—It is easier to break.

Fourth.—A local as well as a general effect may be obtained.

Says he, further on:—

It would be especially suited to that class of pulmonary affections where a topical as well as a general action was desired. In numerous experiments, I have found it of the greatest benefit: in the insomnia of phthisis due to a frequent, irritative cough; in spasmodic asthma; and the asthmatic symptoms of emphysema and chronic pneumonia. Not only does it check the cough, but it permits of sleep in the recumbent posture, a thing that, before its use, had, in some cases, been impossible for months.

Over the other methods of using the drug it has the advantage of requiring long smoking to form a habit, and the least physical harm when the habit is formed. In many cases of phthisis, it would make but little difference whether a habit was formed or not, as the patient is certain to die, and nothing so thoroughly smooths the path to the grave as opium. In other cases, its occasional use, especially if the patient did not know what he was smoking, would not produce any morbid craving for the drug.

The trial of the opium-pipe in the wards of one of our large hospitals would probably give some very decided results; not only in pulmonary, but in cardiac and other affections.

In catarrhal inflammation, opium-smoking would be especially indicated, as it is a well-known fact among smokers, that gleet, gonorrhœa, leucorrhœa, and nasal catarrh rapidly disappear in the smoker. Furthermore, this is about the only way of using opium alone that creates (to the novice) nausea, profuse perspiration, and decided relaxation; an effect that is reached but imperfectly by Dover's powder.

I know of one case of malarial neurosis of the heart, that has been seen by Professors Loomis, Clark, and Janeway of this city, and Walsh of London, where the daily smoking of a few pipefuls of opium was the only way of using it that would control the palpitation and pain. Morphine and opium by the mouth or rectum produced constipation, loss of appetite, gloom, and despondency, all of which disappeared after he abandoned them for the pipe.

There are those who will perhaps look upon the course I am taking in this matter as opposed to that which I have written before, and censure me for trying to introduce, as a therapeutic measure, a new plan of using a drug that already numbers its slaves by thousands. In anticipation of such censure, I can only say, that opium will be used in medicine so long as medicine is practiced, and if we can bring forward a manner of using the drug that shall offer the following advantages, we are doing a real service to humanity:—

First.—Maximum result from a minimum amount.

Second.—Rapidity of action.

Third.—Advantages of local effect.

Fourth.—Least physical, mental and moral ill-effect from continued use.

Fifth.—Greatest difficulty in forming a habit when properly used.

Sixth.—Comparative ease with which the habit is broken.

The rapid spread of the habitual use of morphia hypodermically, has been due to the placing of syringes in the hands of patients. If the physician will conceal the name of the drug he is using in the pipe, and administer it himself to the patient, there is but little danger of the formation of a habit.

Finally, other drugs (their aqueous extract), may be combined in definite amount with the opium, and also used for inhalation.

Nerve Stretching in Lateral Sclerosis.

We take the following case from a recent number of the *Lancet*. It is reported from the Manchester Royal Infirmary:—

John H., aged thirty-six years, was admitted July, 1880, under the care of Dr. Morgan, suffering from well marked symptoms of lateral sclerosis. The patient presented the characteristic spastic gait; the patellar reflex and ankle-clonus were much exaggerated. The muscles of the thighs (more especially the abductors), and also those of the legs, were rigid and contracted and their reflex activity was readily excited. There was no atrophy, nor loss of sensation, but he complained of severe pains in the abdomen and both lower extremities, which were especially worse at night, and could not be relieved by morphia or other means.

At Dr. Morgan's suggestion, and with the object of affording relief from the shooting pains in the limbs, the left sciatic nerve was exposed and stretched by M. Southam, on July, 13th, 1881, just below the spot at which it emerges from beneath the lower border of the gluteus maximus, sufficient force being employed to raise the limb from the horizontal position, and traction being also made in both an upward and downward direction, so as to bodily move the patient upon the operating table.

Immediately after stretching the nerve, the patellar-reflex and ankle-clonus completely disappeared in the limb operated upon. The operation was not followed by any apparent loss of sensibility, but the spastic contraction of the muscles of the left thigh and leg was somewhat diminished, as proved by the fact that flexion

and extension of the limb were considerably freer than before its performance. On the second day after the operation the shooting pains in the abdomen and both lower limbs suddenly ceased, and the same evening he passed the first night free from pain for twelve months. In the course of a fortnight ankle-clonus and patellar reflex began gradually to reappear, and soon re-asserted themselves with almost all their former intensity. Six weeks later there had been no return of the attacks of pain; the movements of the left limb were still much freer than those of the opposite side, and the patient expressed great satisfaction at the relief the operation afforded him.

Compensation and the Vis Medicatrix in Disease.

On these two related subjects, Dr. R. Douglas Powell, of London, has some excellent observations in a recent introductory lecture. We quote them from the London *Med. Times and Gazette:*—

We must look to *compensation* as a great principle in the natural history of disease. Compensatory function is the *modus vivendi* in chronic disease. It is a subject upon which, again, our text-books are curiously silent. All the knowledge you will gain of it will be gathered in the wards and the out-patient room. Here, for instance, you will see a man walking about the ward or attending the out-patient room with apparently but little the matter with him; he is very well on level ground, but is short-breathed on exertion. There is another patient propped up in bed gasping for breath, with dropsical limbs and engorged viscera. Yet these two people have precisely the same form of valvular heart disease, but in the one case the heart muscle has gained power to maintain the circulation, notwithstanding its disabled valve; in the other case this compensatory power has not yet been established. In another case, again, it perhaps never will be established. This is but one illustration of compensation in chronic disease. You may observe the same principle at work in case after case, and in every region and system of the body. The *vicarious* principle by which one set of organs will temporarily bear the burdens of another, is well recognized in medicine; you will see frequent illustrations of it in the wards. I do not wish you to study these phenomena merely for the satisfaction they will afford you, nor as intellectual exercises or matters of purely scientific interest, but because of their direct practical bearings upon the treatment of disease. They are the essential conditions of life to thousands of people, and to start, to stimulate, and to maintain them in chronic illness are the grand objects of our art, in attaining which some of the most brilliant triumphs of therapeutics are achieved. Nor can an accurate opinion as to the future of any chronic illness be formed without taking into account what may be effected by reparative or compensatory processes or by vicarious function in restoring a working equilibrium. These constitute our wealth of vitality. Two men may stand side by side with the same disease, yet the one is bankrupt of resource, while the other has a heavy constitutional balance in his favor.

A full recognition of the *vis medicatrix naturæ* does not warrant, as it has been held to do, an expectant or handfolded treatment of disease. Let us keenly scan the ways and means of Nature, as they are manifested to us in healthy and diseased processes, and we cannot fail to find abundant room for the resources of art to aid, to direct, and to control her doings; and it is pardonable in us at least to conceive that the science of medicine has been instituted, in the Divine order of things, thus to assist and to control Nature. There is little fear that those who have well studied the natural history of disease will be meddlesome in therapeutics; they will understand and leave much to the *vis medicatrix naturæ*, but they cannot fail to have observed that this same *vis medicatrix* plays sad havoc with us sometimes. People would not infrequently be choked or starved by Nature's attempts at repair, were it not for timely surgical interference. Well-nigh all the graver forms of valvular heart disease are due, not so much to the original lesion, as to the after-attempts (Nature's attempts), at repair by cicatricial processes. The surgeon frequently suffers the greatest embarrassment from Nature's determined efforts to heal in the wrong place. Modern research has discovered that we are beset on all sides by pernicious agents, against whose insidious attacks Nature, unaided, is often powerless; but Art steps in, and our Pharmacopœia has of late years bristled with antiseptics and germicides. In short, you will find in practice but few cases in medicine or surgery in which you can with a clear conscience stand aside and say there is nothing to be done. You may sometimes cure those that without your aid would die; you may always relieve suffering when present, and in hopeless cases you may prolong life and strip death of some of its terrors.

Stomach Wounds.

Dr. A. Dunlap, of Springfield, Ohio, communicates the following interesting and instructive case to the *Medical Record*, Oct. 22d, 1881:—

In 1869 I had a case which exhibited the wonderful tolerance with which the peritoneal cavity bears wounds. I was called to a young man, aged twenty, robust constitution and uninterrupted good health. He had fallen with his stomach on a rapidly revolving shaft, just where it was fastened by a half-inch iron bolt, the bolt projecting about an inch. His clothing caught and held him tightly against it, while the revolving bolt cut the wall of the abdomen and the stomach, drawing the latter out of the cavity, and making a wound five inches long in the wall, and four and one-half inches in the stomach. It occurred just after he had eaten a hearty meal. I saw him about an hour after the accident. There was no appearance of shock in his pulse, nor of pain in his countenance. The stomach was partly drawn out of the wound, also a very considerable portion of the left lobe of the liver. The former was partially emptied of its contents, but none had entered the abdominal cavity; the food that remained was just as he had eaten it. The bleeding had entirely ceased, and there was trickling from the rent in the organ a perfectly clear fluid. In about another hour I had a physician (and chloroform) to assist me in dressing the wound.

After giving him chloroform, I took the stomach up, in order to empty it completely, but the chloroform sickened him, and he began to make efforts to vomit. I could feel the vermicular motion of the stomach as I held it, the pyloric orifice approaching toward the cardiac. The muscular contractions gaped the wound, and the pyloric orifice was forced out until it came plainly to view, the stomach being almost completely turned wrong side out. After several efforts at vomiting, the contents of the duodenum began to come in jets It was of that dark, bilious color which we see in vomiting from an empty stomach. After the vomiting ceased, I cleansed the stomach, and accurately stitched the edges of the wound in that organ to the edges of the peritoneum of the wound in the wall of the abdomen, by closely applied interrupted sutures, and then closed the wound. He came from under the chloroform without any appreciable shock. For thirteen days the pulse never rose above ninety, and only a slight increase in temperature. There was no pain or tenderness over the abdomen. The peritoneum united rapidly, and the stitches came away, and left a healthy granulated surface. But the patient was rapidly weakening. The food taken was sufficient to nourish him, and was digested, as I could see it through the large opening remaining in the walls; but it was forced out through this gap by the action of the stomach, and not down into the duodenum.

He remained bright and cheerful with all these symptoms, till the thirteenth day, when he had a large watery stool. His pulse immediately rose from 90 to 120, and then to 140. In six hours he had another evacuation, and in a few minutes died in collapse. His friends refused a post-mortem examination. The man certainly did not die from inflammatory action, but from rapid exhaustion and the collapse caused by the large watery stool. The extensive surface of the stomach that had become adherent to the walls of the abdomen prevented the vermicular motion from passing the nourishment into the duodenum.

Heat Dyspnœa.

Several physiologists have lately turned their attention to the interesting phenomenon known as "heat" or thermal dyspnœa, and a *résumé* of the results obtained, is given in a late number of the *Revue Scientifique*. It is well known that when the temperature of the blood increases the respiratory rhythm becomes more frequent, dyspnœa supervenes, and those phenomena are observed which are properly attributable to exaltation of temperature. The interesting question arises: Where are the points of attack for the increased temperature? Does it act on the cerebral convolutions primarily, and through these on the respiratory centres, or does it act on the skin first, or on the pulmonary endings of the vagus first, or, finally, does it act directly on the nerve-centres which govern the respiratory movements? Goldstein believes he has proved that increased temperature does not act by way of the skin, because in a heated animal cold affusions do not at once destroy its effects; that it does not act through the cerebrum, or owing to any feeling of uneasiness on the part of the animal, because it is not prevented by morphia injected into the veins; that it does not act by the pulmonary expansion of the vagi, because it is not prevented by their section; but he endeavored to show that it is occasioned by the direct action of heated blood on the respiratory nerve-centres, by employing a method of increasing the temperature of the blood without exciting the sensory nerves at their periphery. This method consisted in exposing the carotid of a rabbit, and without otherwise distributing the circulation through it, surrounding it with hot water, which of course heated the blood passing to the brain and medulla oblongata. Goldstein came to the conclusion that as heat dyspnœa then set in, it was clearly due to the action of the warm blood upon the respiratory nerve centres. M. Gad, with M. Mertchinsky, have made a series of experiments on rabbits in this mode, and on registering by means of a pneumograph, it was found that about thirty seconds after the heating of the carotidean blood the respiratory rhythm became four or five times more frequent, and ten seconds later heat dyspnœa was fully established. The same result was obtained by another experimenter, and in an article in M. Foster's *Journal of Physiology*, contributed by M. Sihler, that observer considered that it was attributable partly to pain, and partly to an increase in the amount of carbonic acid contained in the blood, and to the augmented molecular changes naturally consequent on an elevated temperature. But this conclusion is disputed by the most recent experimenters, Mertchinsky and Gad, on the ground that the type of the thermic dyspnœa differs from that of asphyctic dyspnœa. In heat dyspnœa respiration is short and shallow, while in asphyctic dyspnœa it is deep. According to Mertchinsky, moderate doses of chloral do not modify thermic dyspnœa, while toxic doses almost entirely prevent it from supervening, or at least cause it to appear at a much later period and in a much less marked form. The section of the two pneumogastrics was without effect. Section of the fifth pair did not prevent it occurring, but it was much less distinctly marked. Hence, he concludes that it is not a reflex action consecutive to excitation of the sensory nerves of the face by heat. Moreover, the respiratory excitement is observed in as distinct a form after ablation of the encephalon as before. Hence Mertchinsky maintains that the type and rhythm of the respiratory acts depend on the temperature of the inspiratory nerve centres situated in the medulla oblongata.

Amputation of Breast and Antiseptic Dressing.

The following interesting case and remarks are given in the London *Medical Times and Gazette*, from the University College Hospital, under the care of Mr. Christopher Heath.

E. B, aged sixty-five, a laundress, single, noticed a small, very movable swelling in left breast six months ago. There was a pricking and shooting pain in it; and she had lost a good deal of flesh since its appearance. There was no family history of tumor, the patient's mother and father having each died at eighty.

On admission there was a firm mass in the

upper and outer part of left breast, freely movable over the great pectoral. It sent a short process upward, along the anterior axillary fold, and just here the skin was involved for about one inch square. There was tenderness, but no enlarged gland, in the axilla. Above the clavicle a small movable gland could be felt, but it was not tender. The patient looked healthy, but her skin hung loosely.

Considering the patient's age, Mr. Heath decided to remove only the new growth; and this he did by semilunar incisions parallel to the anterior axillary fold. The wound was washed out with chloride of zinc (forty grains to the ounce), drained by a tube brought out in the axilla, and the edges were approximated by stout wire sutures. Lint steeped in carbolic oil was placed next the wound, and a thick pad of salicylic wool was secured over this by a bandage.

Free discharge rendered it necessary to change the dressings the same evening, and again on the following morning. The patient felt well, and her morning temperature remained normal until the fifth day, when it rose to 100°, pulse to 120; at the same time patient felt ill, and a patch of cutaneous eruption spread from wound some distance down the back. Next morning the temperature was normal, and in four days the blush had disappeared.

On the seventh evening sharp hemorrhage occurred, and was arrested by douching with iced water and pressure over a sponge. The temperature two hours later was found to be 102.8°, but on the following morning it was again normal. On the tenth day slight hemorrhage into the dressings was found, but on the eleventh day such free bleeding occurred that it was necessary to open up the wound and turn out a mass of clot. A small artery was then seen spouting, but it stopped before a pair of forceps was obtained. There was no union at this time, and the surface of the wound became very sloughy. By the eighteenth day it was granulating well; but healing was very slow, and when she was discharged on the fiftieth day a small granulating patch remained. The temperature at the period when hemorrhage occurred was often subnormal—95° to 97°,—but after this it was only twice 100°.

The patient remains well, and there is no recurrence.

General Results.—Of twenty cases of amputation of the whole breast, often with removal of glands and muscle, nine were treated antiseptically throughout; all were discharged healed, or almost so, in periods varying from eight to thirty-five days—twenty-two on the average. Eight were treated antiseptically—some with, some without the spray—but the dressings became septic within the first week. Of these three died—one of erysipelas and pyæmia; one (a stout woman of fifty) apparently from cardiac syncope; one from asthenia, due to erysipelas and secondary deposits in liver; one never healed, from recurrence, and the others were slow in doing so; but two were very fat women. The average temperature was much higher than in first series. Two were dressed with salicylic wool; one died of acute septicæmia, the other recovered well; one was dressed with cotton-wool, and died of septicæmia.

On the Treatment of Empyema.

The Cincinnati *Lancet and Clinic*, October 15, 1881, contains the following article on this subject, by Dr. E. F. Wells, Minster, Ohio:—

The healing of an empyema is effected by the evacuation of the pent-up pus and the adhesion of the opposed surfaces of the altered pleural membrane. This is usually a tedious process, and it sometimes happens that a small cavity at the bottom of the pleural sac remains, which obstinately refuses to heal. To this cavity a sinus leads, and the discharge of pus may be free, but the lung cannot fully expand, because of the firm adhesions or because of its altered texture; the ribs do not sufficiently contract; or there may not be enough inflammatory products deposited in the walls of the pus cavity to cause its obliteration. If the walls of the purulent cavity are approximated they usually quickly adhere, but it is self evident that they cannot do so if widely separated.

In the treatment of this condition I have had excellent results from the use of a snugly fitting abdominal bandage, fitted so as to hold the abdominal viscera up against the diaphragm and the pus cavity. If the pressure is sufficient and continuous it will, in all probability, obliterate the empyemic cavity, bring together its walls and cause adhesion. The bandage is to be worn continually. In addition, the patient, if old enough, is directed to practice forced inspiration at frequent intervals. If the patient is too young to practice forced inspiration it should be made to cry occasionally. By forced inspiration the adhesions which prevent the lung from expanding are stretched or perhaps torn, and by liberating the portion of lung then bound down, may effect a good purpose.

These means are intended to be supplementary to those ordinarily used, such as maintaining a free vent for the secretions, injections for cleansing purposes or for the purpose of stimulating languid surfaces, etc. Into this field I do not desire now to enter, wishing only to call attention to the use of the abdominal bandage and forced inspiration in certain cases of empyema not otherwise amenable to treatment; and if perchance the procedure be new, I can only say that it will fulfill every anticipation that may be entertained of its usefulness; and if it be as old as the art of medicine itself it is a strange example of the mutability of the thoughts and ideas of men that a measure of such value should be so far forgotten as to find no place in the medical literature of to day.

A Case Illustrating the Identity of Croup and Diphtheria.

Under this heading Dr. T. F. Pearse reports the following in the *British Medical Journal*:—

In August last, a boy six years old returned to his home in the country, from having been to the Moorfields Ophthalmic Hospital and undergone an operation for traumatic cataract. About a week later he complained of sore throat, and his mother states that he was ill and troubled with it for over a week. About ten days after his return from London his eldest sister was attacked; and a few days after the commencement

of her illness, the mother, another son, and the baby were seized with it. The baby was a sickly, delicate child at the time, suffering from acute eczema of the head and neck. For two days, however, it became very ill, and could not be got to swallow. The throat was reddened and swollen, but there was no false membrane to be seen. After two or three convulsive fits, it died quietly. The other sick members of the family, viz., the mother, eldest daughter, and one son, were all feeling ill, and complained of their throats; but besides swelling and redness of the tonsils and palate, there was nothing suspicious to be seen. A day or two after the baby died, however, the boy, who was at the time ill in bed, became much worse, and false membrane of an unmistakable type appeared on the uvula, palate and tonsils. Shortly after this, another son was taken ill, but with only the sign of ordinary sore throat. Up to this time the only remaining member of the family (besides the husband) who had not been ill, was a little boy aged three years. About a week after the baby's death, however, he was said to be poorly and complained of his throat. His symptoms gradually developed; he became hoarse, coughed a little, lost his appetite, and his mother said he seemed at times as if he was going to be choked. There was no membrane visible from the mouth, the throat being merely red and swollen. The child, however, when asleep, breathed noisily, as if there was some obstruction in the larynx. The mother stated he awoke during his sleep, had fits of coughing, with a "croupy" noise, and great difficulty to get his breath. He was rather better during the day. The case of this last child corresponds exactly with the disease so called "croup," whereas that of the other child—his elder brother—exactly corresponds with the ordinary form of diphtheria. The family, although not strong, have previously been in good health. These cases seem all to have occurred through the illness of the boy brought from London. There has been no other case of diphtheria in the neighborhood. In only one case has actual membrane been discovered; but the prostration, swelling of the glands of the neck, and other symptoms of diphtheria, have been very marked. The boy with so-called "croup" is just the age at which this disease occurs; the others may be said to be too old for "croup."

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

—Among recent monographs are:—

A reprint from the Gynecological Transactions, containing a paper by Dr. A. Reeves Jackson, on Uterine Massage as a Means of Treating Certain Forms of Enlargement of the Womb.

A reprint from the *Archives of Opthalmology* for Sept., 1881, on Ophthalmological Anomalies, by Dr. P. D. Keyser, of Philadelphia.

A reprint from the *Transactions of the New York Academy of Medicine*, containing a description, by Dr. Louis Elsberg, of New York, of an apparatus called the Galvanic Accumulator, for storing dynamical electricity for cautery and illuminating purposes.

An address delivered by Prof. A. Jacobi, in the lecture-room of the College of Physicians and Surgeons, New York, Oct. 3d, 1881, introductory to the course of lectures of the term 1881–82, the subject being *Rudolph Virchow*. This comes to us in a reprint from the *Medical Record*, Oct. 22d, 1881.

An introductory address delivered before the students of the Chicago Medical College, at the opening of the session of 1881–82, by Prof. E. O. F. Roler.

BOOK NOTICES.

Artificial Anæsthesia and Anæsthetics. By Henry M. Lyman, A.M., M.D., Professor of Physiology and Diseases of the Nervous System in Rush Medical College, and Professor of Theory and Practice of Medicine in the Woman's Medical College, Chicago, Ill. Cloth. 8vo. pp. 338.

A Treatise on Food and Dietetics, Physiologically and Therapeutically considered. By F. W. Pavy, M.D., F.R.S., Fellow of the Royal College of Physicians; Physician to, and Lecturer on Physiology at, Guy's Hospital. Second Edition. Cloth. 8vo. pp. 402.

The above are the titles for September and October, respectively, of Wood's Library of Standard Medical Authors, published by William Wood & Company, 27 Great Jones street, N. Y.

Prof. Lyman's work may be regarded as a systematic compilation, or rather a digest of all that has heretofore been written on the subject of anæsthesia. The book opens with a very interesting chapter on the history of anæsthesia, from the time of Noah (might he not just as well have gone a few centuries further back, to the time when the first important operation was performed on an anæsthetized subject in Paradise?) until the end of the first half of the nineteenth century, when the value of anæsthetics in surgery had become an established fact. The author refers to numerous authorities, proving that the ancients were familiar with drugs possessing anæsthetic properties, and that these were occasionally made use of for the same purposes that they are to-day. The phenomena of anæsthesia are next described and its physiology discussed. Then follow chapters on the administration of anæsthetics, method of producing anæsthesia, ether inhalers, nitrous oxide inhalers, accidents of anæsthesia and their treatment, anæsthetic mixtures, artificial anæsthesia in obstetric practice and in dentistry, local anæsthesia, mortality of anæs-

thesia, medico-legal relations of anæsthesia, etc. Considerable more than two-thirds of the volume is taken up with descriptions of the various anæsthetic substances, their nature, comparative safety, etc. The author writes in a very pleasant, we might say fascinating style, and we believe this to be the most complete monograph on this subject in existence.

Dr. Pavy's treatise on food and dietetics is likewise a work of rare interest, treating as it does of a subject so intimately connected with our physical well being. In his introductory remarks on dynamic relations of food, the author paves the way for the intelligent comprehension of the succeeding chapters, in which *food* is treated of under the following headings: On the "Origination of Food"; the "Constituent Elements of Food"; "Alimentary Principles"; "Alimentary Substances"; the "Preservation of Food"; "Principles of Dietetics"; "Practical Dietetics"; "Therapeutic Dietetics," and "Hospital Dietetics." Under alimentary substances he includes all kinds of beverages, which are treated of in full, and under practical dietetics he quotes from the writings of travelers, showing the varieties of diet consumed by different nations; these extracts are extremely interesting. The work being the only one of its kind in the English language that we know of, and being in reality a scientific treatise, carefully written and full of valuable information, we heartily recommend it to physicians and students of hygiene.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, at its Eighty-third Annual Session, held at Baltimore, Md., April, 1881. pp. 398.

The subject of the address of the president, Dr. H. P. C. Wilson, of Baltimore, was "Some of the Claims which the Medical and Chirurgical Faculty has on the whole Medical Profession of Maryland, as well as on its Members." He spoke of the past and present of the Faculty, and urged the importance of the establishment of a complete library for the use of its members. His address was eloquent and replete with poetical quotations. Dr. William Goodell, of this city, delivered an address on "The Dangers and the Duty of the Hour," which we have already referred to elsewhere. Besides the reports of the various sections, which occupy a little more than one-fourth of the volume, and comprise several valuable papers, three papers were read by invitation. The first of these was by Prof. H. Newell Martin, of the Johns Hopkins University, on "A New Method of Studying the Mammalian Heart;" the second was by the same author, and Dr. W. T. Sedgwick, the subject being "A Study of Blood Pressure in the Coronary Arteries of the Mammalian Heart;" the third paper was on "A Fatal Form of Septicæmia in the Rabbit, produced by the Subcutaneous Injection of the Human Saliva," by Geo. M. Sternberg, Surgeon U. S. A. Among the volunteer papers, we notice some of considerable interest, to which we shall have occasion to refer hereafter. The latter part of the volume contains an account of the *Celebration of the Medical and Chirurgical Faculty, held in Honor of the Sesqui-Centennial Anniversary of the Founding of Baltimore*, at the Hall of Faculty, October 13th, 1880. The principal addresses were by Dr. G. Lane Taneyhill, who gave a Historical Sketch of the Medical Societies of Baltimore from 1730 to 1880; "Medical Journalism in Maryland" by Dr. T. A. Ashby, Editor of the *Maryland Medical Journal;* and the "Medical Schools of Baltimore" by Dr. Eugene F. Cordell.

The Physician's Visiting List for 1882. Philadelphia: Lindsay & Blakiston. Price $1.25.

This visiting list, having now reached the thirty-first year of its publication, is so well known to the profession that little need be said here of its merit. It is arranged for fifty patients per week, and contains the usual blank pages for monthly memoranda, addresses of patients and others; nurses and their references; accounts asked for; memoranda of wants; obstetric engagements; vaccination engagements; records of births and deaths, etc. Also an almanac for 1882; table of signs; Marshall Hall's ready method in asphyxia, poisons and antidotes; the metric or French decimal system of weights and measures; posological table, and table for calculating the period of utero-gestation.

The Medical Record Visiting List, or Physician's Diary, for 1882. New York: William Wood & Co. Price, for thirty patients, $1.25; for sixty patients, $2.00.

This visiting list is handsomely bound in red and green leather with gilt edge leaves, and contains tables of comparison of English with metric weights and measures, and of Centigrade and Fahrenheit thermometric scales; table of signs; almanac; table for estimating the probable duration of pregnancy; approximate equivalents of small weights; doses of drugs for subcutaneous injection; doses of common and rare drugs; drugs suited for atomization and inhalation with doses; disinfectants, urine analysis; poisons and their antidotes; emergencies; facts; Lister's antiseptic solutions; treatment of asphyxia from various causes, in addition to the usual blank leaves for records of all kinds. It is most admirably arranged and elegant in appearance.

THE

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FORM AND COLOR IN EVOLUTION.

Now that æsthetics are ruling the day, and the pursuit of the beautiful is coming to be looked upon as one of the properest employments of life, it is well to consider the æsthetic sense from a broadly physiological point of view. Within the last score of years it has, in fact, come to be accepted as one of the most potent influences in modifying organic nature throughout nearly all its realms. With the Darwinian doctrine of evolution was introduced the theory of sexual selection as one of the powerful modifiers of organic form. The stronger sex in each species chose mates from the other sex, according to the prevailing notion of the beautiful; the brilliant plumage of birds, the pied and spotted skins of animals, the gay decoration of the butterfly, even the vivid and varied hues of the flowers, can generally be traced to the exercise of selection, based upon preference or admiration. So also symmetry of form and grace of carriage have been preserved, while deformity and awkwardness have fallen away in the general race for the beautiful.

Confining the range of our observation to man, although we find the ideals of beauty differing vastly in different communities, yet everywhere this ideal shows itself powerful in influencing the choice of mates, and thus in deciding the perpetuation and vitality of the stock. The relation is unquestionable. Were there a community where rickety and deformed women were particularly sought after, either the community itself would perish in a few generations, or its poorest and weakest members, who were obliged to take as spouses the rejected strong and healthy women, would outlive the upper classes and come into possession of the ruling power, and thus reverse the false and injurious ideal which had been established.

In higher matters, there is no doubt but that the prevailing tone of mind reacts directly on the features, and still more positively do the amount and quality of nutrition. The "cat's eye" countenance found on some of the Archaic Greek sculptures is believed, by some anthropologists, to have been acquired by the habit of looking eagerly at the bones, etc., which were being gnawed by the teeth! This appears overdrawn, but certainly the prognathic skull of older types, which is also still found in certain African tribes, indicates the predominance of the struggle merely for food. The coarse mouth and jaw so common among the lower order of Irish peasantry is the result of an insufficient diet for many generations. In this country, where food is abundant, it often disappears in two or three generations, even in Irish families of unmixed blood.

Although occasional exceptions are noted, the general rule that low tastes and mean associations stamp an indelible imprint on the face, holds good. One has but to go through the "rogues' gallery," kept at the police headquarters of our large cities, containing the photographs of the numerous distinguished rascals of the day, to be convinced of this fact. As is well said by Shakespeare:—

"In many's looks, the false heart's history
Is writ in moods, and frowns, and wrinkles strange."

There are few persons of violent and uncontrollable passions, or of base habits, who do not wear the fact blazoned on their faces, patent to the eye of all accustomed to study the lineaments and their relations to the emotions.

Even complexion and color are said to be affected by mental habits. In India, the higher classes approach nearer the normal white Aryan race. The color is not only an index, it is said by some ethnologists to be a consequence of mental development. Pure blacks, educated through several generations, lose several shades of their primitive hue. It is not an accident, or mere coincidence, that the white race is the most enlightened; it is believed by some that the higher forms of mental activity act directly through inhibitory nervous force on the deposition of coloring matter in the epidermal cells. The question is a curious one, and deserves more thorough investigation than it has received.

Notes and Comments.

Anatomical Anomalies.

Dr. J. G. Wiltshire, of Baltimore, mentions, in the *Maryland Medical Journal*, the occurrence, in a colored subject of fine physique, of a peculiar series of anomalies in the position of the heart and the arrangement of some of the arteries. The heart was found on the right side, with its base at the proper level, corresponding with the upper borders of the third costal cartilages, with its apex pointing to the right, resting on the diaphragm at a space between the fifth and sixth ribs. It was normal in size and appearance, and had apparently taken this position in its cavity without any agent to determine the misplacement.

From the left side of the heart the arch of the aorta came off, and in every way behaved as it ought to have done, save in giving off its branches. The arteria innominata was wanting, its branches coming off from the arch in the following order:

The right common carotid arose from the upper face of the transverse part of the arch, where it begins to descend toward the third dorsal vertebra, and then it ascended, in front of the trachea, to the right side of the neck, to its usual point of bifurcation into the external and internal carotids; the former gave off no branches until it reached a point opposite the symphysis of the chin, where a short axis was thrown off, from which the facial, lingual and superior thyroid arteries arose. The latter (internal carotid) presented nothing that was at all irregular in its behavior.

The left common carotid artery was derived from the outer face of the descending part of the arch and ascended, upon its old bed, to its usual point of bifurcation, acting as did its fellow on the opposite side.

The left subclavian arose from the descending part of the arch of the aorta, at a point where it crosses, and passed upward and outward to its usual line of passage to the anterior border of the first rib.

Nothing more occurred to the arterial tree to interest us, until it passed into the abdomen, where the cœliac axis came off from the posterior face of the aorta, and passed to the right of the latter to its front, where the hepatic, gastric and splenic arteries were given off. There were two renal arteries on the right side, whereas there was only one on the left.

Sex in Nature.

An instance of the superficial half-science of the day is given in the last number of the *Popular Science Monthly*, by M. Delauney. We give him the benefit of his full statement:—

"The sentimental pretensions put forward by a political school, which holds that woman is intellectually the equal of man, give a character of actuality to the question of the comparison of the sexes. This question, which it has been the custom to treat from a metaphysical point of view, is to us purely anthropological, or rather zoölogical, for we propose to show by characteristic examples, borrowed from the whole animal kingdom, that sexuality undergoes the same evolution in all species, including the human species. The female surpasses the male in certain inferior species. The males are smaller than the females among many cephalopods, and among some cirripeds. With a few exceptions, the superiority of the female prevails among the annelids, and among certain articulates, as bees, hornets, wasps; and female butterflies are larger and heavier than males, a difference being observable even among the larvæ. A like superiority of females may be observed in many fishes, as in the cyprinoids, and in reptiles. This is, however, no longer the case among the superior vertebrates. The males of birds and mammals are nearly always superior to the females.

"To sum up, the two sexes, at first unequal in consequence of the superiority of the female over the male characterizing the lowest species, become equal among species a little more elevated in the animal scale, and become unequal again in consequence of the pre-eminence of the male over the female, which is observed in all the higher species. The supremacy of the female is, then, the first term of the evolution which sexuality undergoes, while the supremacy of the male is the last term."

Now this pretended *ex cathedra* statement is nothing but a hasty generalization from half seen facts. The existence of sex differs in different species, without bearing any definite relation to the scale of development. This is true in the vegetable as in the animal world. Such assertions as the above are far from deserving the name of contributions to science.

Chloral Hydrate in Diabetes.

The Glasgow *Medical Journal* says, that Professor Eckhard shares the opinion of Mering and Musculus, that the urine of animals under the influence of chloral never contains sugar. The author has arrived at this conclusion from the following experiments:—

After injecting a certain quantity of chloral hydrate under the skin of a dog, the fourth ventricle of the brain was punctured; no sugar, however, appeared in the urine. In a second animal glycosuria was first produced by puncture of the floor of the fourth ventricle: chloral was then injected and sugar disappeared. Glycosuria may be produced reflexly by section of the vagus in the neck and stimulation of proximal extremity; but the experiment fails in chloralized animals. Similarly no sugar appeared in the urine of a dog made to breathe carbon monoxide, when chloral (five grams) had previously been administered. This evident influence of chloral over the excretion of sugar by the kidneys, has been turned to account in the treatment of diabetes; in two patients who were subjected to this method of treatment, a marked decrease was observed both in the quantity of urine and in the amount of sugar which it contained.

Congenital Absence of One-half of the Cerebellum.

At a recent meeting of the Pathological Society of London, Mr. Pearce Gould showed the occipital bone of a man whose cerebellum consisted of the left hemisphere only. The man was aged eighty when he died, and three months previously had been an inmate of the Lambeth Workhouse Infirmary. All that was known of his history was, that he had been a gardener in the same situation for sixty years. While in the infirmary, he was confined to his bed, but was able to sit up in bed, and with assistance walked to the lavatory. He was very quiet, but quite rational, and no evidence of nerve lesion was observed. The deformity was only discovered some weeks after death, in the dissecting-room of the Westminster Hospital; and the brain was so soft, that it was found impossible to preserve it. The left hemisphere of the cerebellum appeared normal, but the right hemisphere was entirely absent. The spinal cord appeared to be symmetrical. The occipital bone showed a large cerebellar fossa on the left side, and only a very small and shallow one on the right. The groove for the superior longitudinal sinus continued across this fossa to the jugular foramen, where it was joined by the superior petrosal sinus which grooved the mastoid bone. There was thus no groove in the usual situation of the right lateral sinus. The malformation was evidently congenital.

Hydrocyanate of Iron in the Treatment of Neuralgia.

Dr. J. Thos. Stovall, of Columbia, Ala., calls attention, in *Gaillard's Medical Journal* for Oct., 1881, to the value of hydrocyanate of iron in the treatment of neuralgic affections. He regards it as an anodyne, a hypnotic and an analytic tonic, possessing highly sedative properties. He has found it most beneficial in cases of neuralgia dependent upon or connected with an anæmic condition of the system, and in those obstinate cases of neuralgia assuming periodicity. He generally gives it together with quinia and morphia in the following combination:—

R. Quinia,	grs xij	
Hydrocyanate of iron,	grs. xviij	
Morphia,	gr. j.	
Ext. gentian vel valeria,	q s.	M.

Make pillular mass; make 12 pills.

Sig.—Take one pill every three hours till six are taken, wait six hours and take balance.

Communicability of Syphilis by Suckling.

In the *Giornale Italiano di Soresina* (1880, p. 15), Professor Scarenzio relates a case, which, if free from error in observation, is of much importance. A healthy young woman, aged 19, married, in December, 1874, a vigorous young man, lately returned from his regiment. In September, 1875, she gave birth to a weakly in-

fant, which developed symptoms characteristic of inherited syphilis. When seven months old, its lips became the seat of erosions and ulcerations at the commissures. At the same time the mother, who had exclusively suckled the child, saw a chancre, accompanied with enlarged glands, develop on the right nipple, shortly followed by a characteristic syphilitic eruption. She gave birth to another syphilitic child in July, 1877. The author infers, from this case, that a woman may bear a syphilitic child to a syphilitic father, and remain herself uninfected; and, further, that it is imprudent to cause a syphilitic infant to be nursed by its mother, unless the latter should previously have exhibited symptoms of syphilis.

Santonine Against Ascarides.

The medication par excellence against ascarides, and which has dethroned other forms of treatment, is that by the glucoside of semen as against santonine, which is constant in its effects, tasteless, and active in small doses.

It was discovered in Germany as recently as 1830. At the dose of three to eight grains it induces xanthopsia, and a reddish coloration of the urine, but expels the worms completely, and without pain. M. Baylet (*Revue de Thérap. Med. Chirurgicale*), recommends the following prescriptions:—

1st. For a child under three years:—

℞. Santonin, gr. iij
Calomel. gr. iij. M.
Et divid. in chart, No. viij.

2d. Children from three to twelve years:—

℞. Santonin, gr. iij
Calomel, gr. vj. M.
For eight powders.

3d. For an adult:—

℞. Santonin, gr. vj
Calomel, gr. ij
Jalap pulv., gr. iij. M.
For eight powders.

Sig.—One of the powders to be taken each morning in honey. On the fourth day, a laxative, preferably castor oil, should be taken.

Bicarbonate of Soda in Tonsillitis.

M. Giné, Professor of Clinical Surgery, at Madrid, affirms that the repeated application topically of bicarbonate of soda, is of incontestable efficiency in tonsillitis. The powder may be projected through a tube on to the inflamed parts or applied directly with the finger.

The relief is often immediate, and the cure often rapid, sometimes requiring but twenty-four hours. The application is rarely inefficacious and often aborts the disease in its prodromal stage.

M. Giné also considers these applications of great benefit in hypertrophy of the tonsils, often obviating the necessity of amygdalotomy.

Special Reports.

NO. XXI—DISEASES OF THE KIDNEYS.

Recent investigations into diseases of the kidneys and associate parts have been chiefly in the direction of their pathology. Little new has been brought forward in regard to treatment. Pathology has, however, led to greater exactness in diagnosis, which is the first step toward successful therapeutics.

THE RESULTS OF A NEPHRITIS.

In sketching the progress of diseased conditions, Prof. Potain said, in a recent lecture (*Revue Médicale*, March, 1881):—

Take an interstitial nephritis which has been induced by the impression of humid cold. During its course, modifications in the peripheric circulation will supervene, and you may have hypertrophy of the left ventricle; then, under the influence of a slight external cause, the renal lesion attains the secretory elements, and a uræmia appears; the stomach in its turn suffers, and disorders of digestion of a slow chronic form react upon the other organs—the lung, for instance, becomes the seat of bronchitis or apoplexy; the circulation is effected with difficulty, the cavities of the right side of the heart become affected in their turn, and hypertrophy; the action of the organ is enfeebled, a systole exists, the disturbances in the circulation increase, the liver and kidneys become congested, cerebral symptoms appear, and the patient dies. This is the succession of facts, and according to the period at which you are called to the patient, the primary cause will have ceased to be accessible to therapeutics. Are you, then, to combat the actual symptoms? No, but proceed backward to those which are still attainable.

AMYLOID DEGENERATION OF THE KIDNEY.

An investigation on this subject is published by Wagner in *Archiv für Klin. Med.*, *Bd.* xxviii. As to cause, he found that out of 265 cases, 136 accompanied phthisis; 56 occurred along with disease of bone (non-syphilitic); 36 accompanied syphilis; 30 were found in connection with certain rarer diseases; and with regard to 7 no probable mode of origin was apparent.

Another portion of this paper deals with the symptomatology of waxy kidney. In comparatively few cases were the symptoms observed during life so closely as to be of service; only 24 appear to have been available, and of these the majority were only under observation for very

limited periods. Studying them in detail, WAGNER separates them in four groups:—

1. Slight amyloid degeneration of the cortical or the medullary substance, or of both, without alteration of the epithelium or of the stroma. This variety was hardly observed clinically.

2. Greater or less waxy degeneration of the cortical or the medullary portion, with a varying amount of fatty degeneration of the epithelium, without changes in the stroma.

3. The same waxy degeneration, along with fresh interstitial changes.

4. Waxy, contracted kidney.

With regard to the condition of the urine in these cases, WAGNER found that it was almost invariably diminished in quantity, and this without diarrhœa, perspiration, or increasing œdema being present. In a few cases the urine was of normal quantity, and only in two does it appear to have exceeded that amount. The quantity of albumen was, in 13 cases of the 15 belonging to the first two groups, in medium or in great amount; but in two cases it was at the commencement small in quantity, afterwards increasing. The tube-casts varied much in number from one day to another. They were for the most part of medium diameter, and usually hyaline, sometimes fatty. WAGNER believes that œdema is more rarely met with in such cases than is generally supposed. In conclusion, he observes that while waxy kidney may often be diagnosed with care, there are many cases in which such a diagnosis cannot be arrived at with any certainty.

PATHOLOGY OF BRIGHT'S DISEASE.

The "Lumleian Lectures" delivered before the London College of Physicians were this year upon Bright's disease, and the lecturer was Dr. REGINALD SOUTHEY, of St. Bartholomew's Hospital. He closed the course with some remarks on the name, "Bright's Disease," and what it meant.

Bright's disease remains for us, at present, a good term under which to group together and study several very important clinical phenomena intimately connected with, and dependent on, some variously marked forms of inflammatory degenerations of the kidney, all of which still possess something in common. The symptoms entailed are mainly the consequence of a local disease.

We are unable to accept Gull and Sutton's idea, that interstitial atrophic kidney is a form so separate by its histology, or by the order of its secondary events, or by the intrinsic nature of its complications, as to justify us in constituting it a wholly distinct disease.

We reserve our opinion that Bright's disease is a real entity, and that, while granular atrophy may be a consequence of this in its most gradual and complete degree, it is the renal disease which gives the characteristic features to the widespread general phenomena.

Bright's disease may be primary or secondary, acute or chronic; its consequences are best followed by recollecting what the functions of the kidneys are, and what their non fulfillment must effect. These are, primarily, to maintain the blood at a proper specific gravity, by removing excess of water and excess of salts from it, as well as special nitrogenous excreta. The duty of the kidney is to regulate the quantity, as well as the quality, of the blood—a matter sometimes lost sight of. If the blood fluid be allowed, at any time, to swell like a flood, either dropsy, the transudation of its more watery part must take place, or the blood-channels must dilate. If excess of salts accumulate in the blood, the specific gravity or weight of the blood column must rise, and increase the friction through the capillaries; it comes, then, to strain first the channels in which it is confined, the chambers of the heart, and the blood vessels, and to tax unduly the pump power of the heart, and the muscular walls of the arteries. If nitrogenous excreta cannot escape by the kidneys, they accumulate in the blood, or must make a way out for themselves by vicarious channels; maintained in the blood, they interfere with the chemical nutritive changes, perhaps effect that general lowering of the body temperature which is characteristic of the uræmic state; making their passage out by the intestines, skin, or serous membranes, they surely, sooner or later, provoke inflammatory changes. Just in so far as Bright's disease is held to comprehend all these phenomena of suddenly or gradually abrogated renal functions, we hold it to be a useful name.

DIABETES MELLITUS.

Some observations on the occasional absence of sugar in the urine of patients suffering from saccharine diabetes are made by Dr. R. SCHMITZ in the *Lancet*, May, 1881. He observes:—

After attacks of diarrhœa in diabetics I have always found, upon examination of the urine, a marked diminution, or even total disappearance, of the sugar. So far as I am aware, a chemical examination of the diarrhœtic discharges has not hitherto been made, whereby one might be enabled to decide whether that fact is to be ascribed to the expulsion of the sugar with the other contents of the intestine, or whether these discharges contain only the products of its decomposition. Be this as it may, the fact itself remains certain, and speaks in favor of the views I have adduced, in further support of which is the circumstance that there is no better treatment for diabetes than a diet practically free from sugar and amylaceous ingredients; for here the amount and quality of the pancreatic juice are sufficient to meet the trifling quantity of sugar present. The practitioner who, like myself, is in the position of having a large number of diabetics under treatment at the same time (in the summer of last year my *clientèle* included one hundred and ten such patients), may easily observe how exceedingly diversified

is the immunity toward sugar in the case of individual patients; in other words, how far the quantity and quality of the pancreatic juice suffices for the satisfactory transformation of the sugar in different cases. Thus one patient will tolerate twenty grams of brown bread (two-thirds of an ounce), but not even ten grams of white bread (a third of an ounce); another can eat both with impunity, and the same quantities of lentils and peas besides; a third, even rice and potatoes, in even larger amount; while another cannot take any of these whatsoever; indeed, not even some starchy gluten bread or leafy vegetables, unless they have been deprived of the stalks with every possible care. I may remark that I always seek to prescribe for each patient a special diet suited to the individual.

THE RETINAL CHANGES IN NEPHRITIC DISEASES.

A great deal of attention has been given to this matter lately. At the last meeting of the Ophthalmological Society of Great Britain, Drs. BRAILEY and EDMUNDS presented a paper on the subject. They said that in chronic Bright's disease there is (as often has been described), a hypertrophy of the walls of the arteries throughout the body, especially affecting the middle and outer coats. In addition to this, there is, in the kidney and in the well known white opaque patches of the retina, a thickening of the intima, leading to an occlusion of the majority of the arteries of the part. This condition is accompanied in each organ by degeneration and inflammatory changes. This degeneration affects in the kidney the epithelial cells of the tubules, and in the retina the nerve-cells, the nerve fibres, and the fibres of Müller. The authors believed this affection of the arteries to be an exaggeration of the endarteritis often observed in the larger trunks of the body generally, where it gives rise to atheromatous patches; and that it precedes and gives rise to the other inflammatory and degenerative changes encountered in the kidney and retina.

ELECTRICITY IN DIABETES INSIPIDUS.

This troublesome complaint seems at times to be controlled by electricity. A quite recent case, reported to the *Lancet*, Oct. 29th, by Dr. C. P. B. CLUBBE, deserves to be quoted in full, to illustrate its effects:—

C. H——, aged thirty-five, housewife. This woman presented herself as an out patient at the Kidderminister Infirmary in October, 1878, suffering from diuresis. She was at that time passing from eighteen to twenty pints of urine per diem. It was light colored, of very low specific gravity, and contained no sugar. The drugs that are recommended for this disease—namely, iron, nux vomica, valerian, and bromide of potassium, were all tried in turn, but without any marked effect. The woman at this time was losing flesh. She was then ordered electricity (faradaism) to be applied over the region of her kidneys every day for about twenty minutes at a time. In the table below there is given the daily average for each week of the amount of urine in ounces during the time this treatment was continued:—

	Daily average.		*Daily average.*
1st week	237 oz.	11th week	151 oz.
2d "	217 "	12th "	154 "
3d "	163 "	13th "	154 "
4th "	154 "	14th "	123 "
5th "	138 "	15th "	103 "
6th "	113 "	16th "	130 "
7th "	140 "	17th "	129 "
8th "	157 "	18th "	123 "
9th "	168 "	19th "	108 "
10th "	160 "	20th "	117 "

This shows that there was a great improvement up to the seventh week; after this the daily average is seen to vary but slightly. At the end of the twentieth week all treatment was left off. During this time she had improved in her general health. She was seen six months afterwards, and was found much in the same state as when she left off using the battery. She was no worse, but was still passing from six to seven pints of urine daily. This case shows that this treatment (probably the most rational of all), for this disease, may be tried with advantage.

ATROPHY OF THE KIDNEY.

The various forms of atrophy of the kidney have been studied by Dr. ZIEGLER, an abstract of whose results we find in the London *Medical Record*: He starts with the investigation of senile atrophy of the kidney, in which, obviously in consequence of generally diminished nutrition, there occur enfeeblement of the circulation, wasting of the glomeruli, first at the periphery, then disappearance of the tubules connected with them, and, finally, more or less extensive small-celled infiltration. The arterio-sclerotic form of granular atrophy stands next to this. Here, the most important changes are wasting of the glomeruli, collapse and atrophy of the tubules, and, finally, hyperplasia of connective tissue. Fatty degeneration occurs secondarily, but the cells become smaller, like those of the looped tubes; most contain cylinders. The vessels are widened, and this seems to be the cause of the increase of urine. The embolic form is similar to the latter. By obstruction to the greater circulation, and increase of the heart's action, the same changes take place in the kidney, which apparently originate in wasting of the glomeruli, perhaps in consequence of exudation into the capsules. Great interference with the nutrition of the kidney of different sorts may lead to extensive degeneration of the parenchyma; but regeneration takes place if the glomeruli have not been involved, or if the destruction be not too great or continued. When the latter

occurs, atrophy results; as occasionally happens, for instance, in acute jaundice. It may also follow parenchymatous degeneration, as seen in the small patches of atrophy on the surface of the large white kidney; but general atrophy occurs only rarely. The glandular degeneration, in all those forms which he groups together as interstitial indurative nephritis, is of secondary importance. The atrophy of the tubules is the result of their abolished function, of the destruction of the glomeruli, which latter depends upon fibrous hyperplasia of the capsules, or on a concomitant disease of the arterial system. Besides the form of atrophy from compression, he gives three groups of atrophy of the kidney. The first, of which the type is the arterio sclerotic form, is dependent on simple interference with the circulation, and must be distinguished from the inflammatory forms. In the second, he classes all the degenerative processes which are followed by destruction of the epithelium (embolism, temporary ligature, chemical irritants), excluding regeneration. In the third group (interstitial nephritis), there is a combination of epithelial degeneration with other processes—cellular infiltration, proliferation of the epithelium of the capsules and glomeruli, wasting of the vascular tufts. Both the latter groups—which differ only quantitatively, not qualitatively, as in both there are epithelial degeneration and hyperplasia of connective tissue—are, nevertheless, to be kept distinct, as there is no "identical pathological principle," as Weigert thinks.

URÆMIA AND ITS TREATMENT.

In a recent paper in *Le Practicien*, Professor Sée lays down the rule that when a person is attacked with dyspnœa without obvious cause in the thoracic organs, the urine should be examined for albumen. He relates two cases, in which the dyspnœa simulated spasmodic asthma, and was not readily diagnosed on that account. He also publishes notes of the case of a young woman attacked by urgent dyspnœa, with great oppression and cyanosis. There was a faint systolic apex murmur, and a few râles over the lungs posteriorly, but nothing sufficient to account for the symptoms. The urine was very albuminous. There was no œdema. She died in a few days. The kidneys were large and red.

In the *Journal für Kinderkrankheiten*, of recent date, Dr. Prætorius publishes the details of eleven cases of uræmia treated with *muriate of pilocarpin*, and arrives at the following results:—

1st. The drug is of distinct value, and should be injected so soon as the symptoms of headache, irregular pulse, vomiting, and diminished secretion of urine appear.

2d. Its administration is only contraindicated in cases of extreme weakness and threatening collapse, or general anasarca.

3d. It has no effect in cases of glomerular nephritis; but, since this condition cannot be diagnosed by the microscope, its administration should not be prevented.

4th. Pilocarpin is not only a diaphoretic, but also has a direct influence on the renal secretion.

Benzoic acid is still relied upon by Dr. Da Costa, of Philadelphia:—

℞. Acidi benzoici, gr. xx
Syrup tolu., ʒ ij. M.
Sig.—This much to be given every third hour, largely diluted with water.

A THEORY OF URÆMIA.

The Glasgow *Medical Journal* gives the following extract of the late theory of uræmia advocated by Drs. Feltz and Ritter:—

1. The proportion of potassium salts, both in blood and urine, varies with the quantity and quality of the food; in dogs badly and insufficiently nourished, it falls to the minimum.

2. A special and prolonged alimentation, consisting of materials containing sodium salts, reduces the proportion of the potassium salts to nearly the same degree as bad and insufficient feeding. The demineralization of the blood is greater, as regards potassic salts at least, than when the diet includes potash in some form.

3. The quantity of potassic salts existing in the blood influences to a certain degree the quantity of urea necessary to provoke grave symptoms or death.

4. Suppression of the renal function by simultaneous ligature of both ureters causes a sensible increase in the proportion of potash salts in the whole blood and in the serum, notwithstanding supplementary gastro-intestinal excretion; in this respect the alkaline salts follow the same law as urea and the extractive matters, both of which are augmented in the blood under similar conditions.

5. The grave symptoms of experimental uræmia not being in proportion to the degree of retention and accumulation of urea or of urinary extractive matters in the blood, and corresponding, on the contrary, to the phenomena produced by the injection of fresh normal urine, or of equivalent solutions of potassium salts, it seems probable that the true toxic agents in cases of so-called uræmia are always the potassium salts which have accumulated in the blood.

NITRO-GLYCERINE IN BRIGHT'S DISEASE.

This agent has been prescribed by Prof. James C. Cameron, M.D., of Montreal, in a case reported in the *Canada Med. Record*, last July. He used a one per cent. alcoholic solution, and of this the dose was at first one, and afterwards two minims, in syrup of tolu. He says of it in

this connection: The case after the first month was hopeless, and treatment was only palliative. In carefully reviewing it, my opinion is that nitro-glycerine prolonged life for nearly two months. It increased markedly the quantity of urine passed daily; but although the *relative* amount of albumen was considerably reduced, the *absolute* amount was not too much affected. The œdema and labored breathing were undoubtedly relieved by its use, and the pulse rendered softer and less corded. From the careful and daily study of this case, I am convinced that in certain conditions, nitro-glycerine is a valuable remedy in the treatment of chronic Bright's disease, and may be administered with perfect safety and without unpleasant symptoms for a considerable length of time.

(To be continued.)

CORRESPONDENCE.

A Stab in the Neck, Severing Internal Jugular Vein and Recurrent Laryngeal Nerve. Complete Paralysis of the Right Vocal Cord. Recovery from the Injury, and Finally, Complete Restoration of the Voice.

ED. MED. AND SURG. REPORTER:—

On the 21st day of June, 1879, John H. Maccallum, a medical student, nineteen years of age, received a deep stab in the right side of the neck, which severed the inferior laryngeal nerve, and also severed or severely wounded the internal jugular vein.

The assault was entirely unprovoked, and the young man did not realize, at first, that he had received a dangerous injury. It was only his coolness and presence of mind that saved his life. Grasping the wound with one hand and holding it as tight as he was able, thus controlling the flow of blood in a great measure, he hastily got into his carriage and with the other hand drove to the office of Dr. Wilbur, his preceptor.

The doctor not being far distant, was speedily summoned, and on seeing the nature of the injury and uncontrollable character of the hemorrhage, sent immediately for the assistance of Dr. E. M. Moore. On the arrival of Dr. Moore the young man was unconscious and very nearly exhausted from loss of blood.

On examination it was found that the injury involved the internal jugular vein, from which the blood was flowing copiously, but by means of acupressure the hemorrhage was arrested at once.

Acupressure is the method which Dr. Moore advocates, and always employs in cases of hemorrhage from wounded veins. He even regards it as far preferable to the ligature in such cases.

After regaining consciousness, the young man found, on attempting to speak, that he was entirely unable to make a laryngeal sound.

For the first three or four weeks he was in a very weak and exhausted condition, and suffered excruciating pains in the right temple, supra-orbital and occipital regions. He recovered gradually, and in about six weeks was out, and at the end of three months was able to resume his duties.

For three months he was completely aphonic. During the first portion of this time he was not able to produce the faintest whisper. After that he began gradually to regain his voice.

November 1st, 1879, a little more than four months after the injury, he called at my office for a laryngoscopic examination. He could then speak in a low, hoarse, monotonous voice. The examination showed his right vocal cord to be completely immovable, and in the cadaveric position.

On phonation the sound was produced by the compensative action of the left vocal cord, which passed the median line to meet its fellow, together with a slight longitudinal tension of the paralyzed cord.

I informed him that it was extremely doubtful if the action of that vocal could be restored on account of the undoubted division of the inferior laryngeal nerve on that side, but to meet the possibility of the nerve not having been entirely or permanently destroyed, or having been to a certain extent reunited, I advised the employment of electricity, the negative pole of the faradic battery applied directly to the larynx and paralyzed muscles with the laryngeal electrode.

In case the nerve was permanently destroyed the application of the electricity would stimulate and strengthen the other laryngeal muscles to assist them to compensate for the loss of motion in this cord.

Accordingly, I made the applications daily, or almost daily, for a short time; then less frequently, but continued them during the following winter and spring. His voice gradually grew stronger and more flexible, and by the 1st of July, 1880 he began to have quite a natural, though somewhat monotonous voice.

No apparent improvement, however, was affected in the condition of the paralyzed muscles, as no increased lateral movement in the cord was perceptible. His ability to modulate his voice continued to increase until he was able to sing in the natural scale up to C. At this note his voice stopped. His inability to produce higher notes than C continued until in February, 1881, when he called, quite delighted, to tell and show me that he could sing and speak about as well as he ever could. To the present time the cord remains completely paralyzed—a slight apparent lateral movement takes place, but this is only relative.

This case is of interest:

First. As a case of traumatic injury to the recurrent laryngeal nerve.

Second. As a rare case of recovery from an injury involving the internal jugular vein.

Third. It illustrates in an admirable manner the action of the crico-thyroid muscle as a tensor of the vocal cord, it, as is well known, being supplied by a motor filament of the superior laryngeal nerve, and consequently, in this case, remaining intact.

Also, it has been very interesting to watch in the laryngeal mirror the gradual development and increased activity of the muscles on the left side of the larynx, to compensate for the want of

motion in the paralyzed muscles on the opposite side; and also to observe the development of the right crico-thyroid muscle as shown in the gradually increased longitudinal tension of the cord with a corresponding improvement in the voice.

Rochester, N. Y, J. O. Roe, M.D.

Vaccination.

Ed. Med. and Surg. Reporter:—

It will doubtless seem to many that nothing new could be learned of vaccination. Be that as it may to the many, still I feel sure that a few, like myself, want additional light on the subject.

Here, hardly a medical journal is issued without some reference to the subject, but I have looked in vain for certain points which may be almost universally known, but of which I am in ignorance.

I will put these points in the form of questions, and sincerely hope that some of the many readers of the Medical and Surgical Reporter will answer them in full:—

1st. Are there persons, never having had any vaccine scars or marks, who are insusceptible to the action of vaccine virus?

2d. If so, are they exempt from variola?

3d. Will vaccination of the pregnant female protect the unborn child, and render it exempt from variola or insusceptible to vaccine virus?

4th. Are persons who have been repeatedly vaccinated, yet without permanent scars, protected?

My reasons for asking the above questions will be explained when I state that since birth I have been vaccinated about twenty times, in nearly fifty places or spots; that twice spurious sores resulted; leaving no vaccine mark or scar; and that in the other vaccinations the results were entirely negative.

Since May 1st, 1881, I have been vaccinated about twelve times, in thirty spots; results negative. The virus used was freshly dried bovine virus, on many points. The operation was usually performed by myself, and with great care, though several times other physicians vaccinated me. My mother was successfully vaccinated more than a year before my birth.

The all important question to me is, "am I protected?" One of my brothers is alike insusceptible to the action of vaccine.

A prominent physician of this city informed me that he vaccinated his wife shortly before confinement, and that the child of which she was soon delivered, has always been insusceptible to the action of vaccine virus, though he has vaccinated it in more than seventy spots, using reliable bovine vaccine virus. As he supplied neighboring physicians with virus, he invariably received his fresh, and while fresh, used it.

Several other cases of insusceptibility to the action of virus has come under my observation, but the above two cases, as samples, will show the reasons I have for trespassing upon your valuable time and space, hoping that this article may receive a full and explicit answer.

E. C. Helm, M.D.

Chicago, Ill.

News and Miscellany.

Smallpox at Paris.

Within ten years smallpox has twice become epidemic at Paris, proving of great gravity at both periods, and at the present moment another epidemic of the disease appears imminent. Those works then which demonstrate the necessity of decisive measures of prevention, should now receive special notice. One of the most important of these is the report presented by M. Bouchardat to the Council of Public Hygiene and Salubrity of the Seine Department.

He makes a striking statistical tableau of the ravages caused by the disease in Paris during the past twenty years; this permits a comparison of the mortality occurring at the same period of time in different years and in different months of the year. These statistics have verified the oft repeated statement: "That the general mortality is considerably less during the years which immediately succeed a great epidemic in any city or determined locality."

If the figures relating to the great epidemic of 1870 be examined, it will be seen that the mortality became progressively greater. From 119 deaths in November, 1869, at the debut of the epidemic, the number increased to 1929 in December of 1870; this was the most fatal month during the whole epidemic and after that there was a rapid decrease in the mortality, which became most evident in 1872, for but eight deaths occurred in the month of September, of that year. In 1873 the epidemic seemed completely spent, for but 17 deaths from smallpox were recorded for the whole year, and the progress of the disease did not seem again to commence until the month of June, 1874. From that time the number of deaths increased slowly until the disease again became epidemic in 1879 and 1880.

M. Bouchardat then enters into the consideration of the means of preventing the spread of the disease. Instead of the separate wards in the various hospitals, he recommends the construction of a special hospital for the more complete isolation of the patients; in connection with such a hospital a maison de convalescence should be established, and the patient not allowed to leave it until there is no longer any possibility of his carrying the germs of contagion without.

M. Bouchardat also recommends a law rendering vaccination and re-vaccination obligatory. The report of Dr. Buchan, of London, shows that the number of deaths is forty times more considerable among the unvaccinated, and during 1880, at Paris, there occurred but three deaths among the military, while the deaths among the civil population reached 773, a result, in great part, due to the fact that the soldiers are always vaccinated on joining their regiments.

The Pest in Russia.

The pest has appeared in the districts of Novgorod and St. Petersburg, both men and animals being attacked.

In the commune of Malbedew fifty persons were attacked and but three died, which would seem to indicate that the disease is exception-

ally benign. Nothwithstanding the circulars recommending the burial of the animals affected with their skins, the peasants continue to skin the animals, and sell the hides without disinfection.

As is well known the great heats seem to extinguish the epidemics of pest; perhaps, says M. Tholozan, because the sand heated by the sun to 70° C. destroys the morbid germs which it might contain.

It is not then astonishing that the pest appears in Siberia during the periods of great heat.

High Thermometric Readings.

The question how far high temperatures recorded in cases of disease are to be regarded as trustworthy indications, was raised at the Clinical Society of London lately, by Dr. Stephen Mackenzie, who recorded the history of a patient under his care in the London Hospital. This woman had for a long time, puzzled the authorities of the hospital by registering most unusual temperatures; in one case 120° having been attained. She was, however, watched for a lengthened period with the utmost care, suspicion having been more than once created by the sudden ness with which even very considerable differences occurred in the readings, and the final result has been to convince Dr. Mackenzie that his patient was able to raise the index at pleasure. This explanation has been more than once suggusted as the probable one for the phenomena in question.

American Doctors and Medicine in China.

A dispatch from Hong Kong, Oct. 15th, says: The Women's Hospital was opened at Tien Tsin on the 8th inst., in the presence of Li Hung Chang and other high Chinese officials. Mr. Angell, United States Minister, who is about to return via Europe, delivered an address. Miss Doctor Howard, the American missionary lady, who was instrumental in saving Lady Li, wife of the Viceroy, when she was given up by all the Chinese doctors last year, is in charge. The hospital just established in Tien Tsin, and another at Pekin, are solely due to the influence of Miss Howard. Foreign medicines in China are now, in consequence, in great favor.

Items.

—Mr. Erasmus Wilson, President of the Royal College of Surgeons, who paid the expenses of bringing the English Obelisk to London, has been knighted by the Queen, in consideration of his munificent gifts for the support of hospitals and the encouragement of medical study.

—The English *Medical Press* gives the following warning: "We are concerned, in the interest of impressionable females and weak-minded young men, to notice the arrival in England of Messrs. Moody and Sankey, of explosive revival fame. Former experience of the pernicious influences of the hystero-religious mania with which these clever men were identified, leads us to hope that most people will guard against an undue preponderence of the emotional passion."

OBITUARY NOTICES.

DR. ROBERT SHELTON MACKENZIE,

The author and journalist, died November 21st, 1881, at his residence, Philadelphia, at the age of seventy-four years. Dr. Mackenzie was born in 1808, in Limerick, Ireland, was second son of Captain Kenneth Mackenzie, author of a volume of Gaelic poetry, Glasgow, 1796. The subject of our obituary notice studed medicine in Cork, and graduated in Dublin, but did not practice, yet he always evinced a lively interest in medicine and the medical profession. This love for the profession of medicine was shown by careful reading of medical works, and his admirable reviews and notices of the same, with his prompt and continuous labors as Secretary and one of the Board of Trustees of the Philadelphia Dental School. He devoted himself to literature from his eighteenth year, when he undertook the editorship of a newspaper in England, in which capacity he contined until 1845, when he became London Secretary of a Railway Company, which latter position he resigned in 1851. In the interval he contributed largely to leading periodicals and annuals in England and the United States, and writing a weekly news-letter to the New York *Evening Star*, from 1834, and was the first regular European correspondent of the American press. Was made LL.D. of Glasgow University in 1844, and D.C.L. of Oxford, in 1844. Published Lays of Palestine in 1828, and numerous other valuable and interesting works.

Dr. Mackenzie removed to Philadelphia in Aug. 1857, and assumed the duties connected with the foreign and literary editorship of the *Press*, a daily paper in this city, for over twenty years.

In his later years Dr. Mackenzie occupied the same position on the *Evening News*.

The lively spirit and great accuracy of Dr. Mackenzie's notes as a book editor, constituted their great value. His life had been passed in intimacy and correspondence with the leading literati and politicians of his times; he had a remarkable memory for dates, events and persons, which would overflow into expression whenever he put pen to paper. Such also was his conversation, crowded with anecdotes of events and of notable persons and things.

The funeral of Dr. Mackenzie took place November 23d, and was attended by many devoted friends and distinguished literary and medical men, in spite of a drizzling cold rain. The students of the Dental College and of the Hospital of Dental Surgery, together with the Faculty and Board of Trustees were present. The Rev. R. Bethel Claxton, of St. Andrews Protestant Episcopal Church (West Philadelphia), made an able address at the house, and the remains were laid at rest in our beautiful Woodland's Cemetry. L. T.

PROFESSOR BOUILLAUD.

We announced a few weeks ago the death of this distinguished Parisian teacher, at the advanced age of 86. His great discovery was the connection between cardiac diseases and rheumatism, which had been foreshadowed by other observers, but of which he was the first to give positive proof in the living patient. He created the word "endocarditis," and gave an excellent

description of the anatomical changes which accompany that disease in its various forms, and through his exertions a fact which till then had only attracted the notice of a few medical men emerged into the full light of day and became a part of our classical knowledge. Bouillaud's greatest victory was achieved in 1831, when he obtained by open competition the chair of clinical medicine at La Charité. Like many men of his time and age, he had imbibed the notions of Broussais, and openly declared that almost all diseases were inflammations, and required to be treated by depletion of the vessels. For Broussais' milder method of applying leeches, he substituted the radical system of "saignées coup sur coup," or thrice repeated bleedings, the patient being subjected to phlebotomy for the second and third time, before he had recovered from the shock of the first, thereby losing about fifty ounces of blood in the space of a single day. The latter years of Bouillaud's career were marked by the highest distinction. He became a member of the Institute and of the Academy of Sciences. In this exalted position he seems to have chiefly acted the part of a *laudator temporis acti*, and whenever any new discovery in the circle of medical science was brought forward, he almost invariably devoted his remaining powers to the task of proving that the fact had been known long before.

We well remember him as he taught, twenty years ago, in the wards of La Charité, pointing out with unflagging zeal the success of the San grado practices he advocated. Toward the close of his life he is said to have modified them somewhat.

DR. DAVID FOULIS,

One of the most brilliant young surgeons of Scotland recently fell a martyr to his duty. This was Dr. David Foulis, of Glasgow. It was chiefly as a specialist in diseases of the throat that Dr. Foulis had made his mark. He achieved a European reputation by his performance of the operation of extirpation of the larynx, an operation which he had repeated with equal success. Recently he had occasion to perform tracheotomy in two cases of virulent diphtheria; from these cases he caught the disease, and died after a few days' illness.

QUERIES AND REPLIES.

Pleural Fistula.

Mr. Editor.—The question of Dr. M. A., "Pleural Fistula," in No. 1289 (Nov. 12th, 1881), of the MEDICAL AND SURGICAL REPORTER interests me. I would propose the following treatment, which alone will be successful, and which surely will bring success, if there is not already or should later develop, dullness at the apex of the lung. *i. e.*, deposit of tubercles. First, Dr. M. A. will find, on examination, that the fistula either goes through a rib or is connected with a rib, the periosteum of which is destroyed. The fistula should be laid open, and a piece of the rib, at least ¾ of an inch long, should be resected. Without the taking away of that piece of the rib there never will be a cure. The operation should be made under antiseptic precautions, and if possible the whole course of Lister's method followed. Then the pleural cavity should be washed out thoroughly by a four per cent. carbolic acid solution, until only the solution returns, free of any debris, etc., etc. After this a drainage tube is inserted and Lister's dressing applied. The wound is afterwards treated as any similar one, *i. e.*, the washing out of the cavity must take place whenever necessary, until at last adhesion has formed. Besides this local treatment the patient must be *systematically* fed and put under tonic treatment. I would like to know the result, and am willing to correspond with the Doctor more fully regarding the case. H. ENGEL, M.D,

Philadelphia.

Pleural Fistula.

Mr. Editor.—I think that if Dr. M. A. will inject a solution of iodine made as follows it will heal in time:

℞.	Iodine	grs. x	
	Iodide potassium,	grs. xxx	
	Aqua pur..	ʒj.	M.

SIG.—Inject into pleural cavity once daily and allow it to remain.

It will destroy the pyogenic membrane lining the cavity, if one, and the fistula and it will heal. Other treatment to be used as indicated. W.

Dr. F. R., of N. Y.—The treatment of emergencies, as poisoning, drowning, etc., is set forth in several pocket records or visiting lists, among others the *Physician's Pocket Record* published at this office.

Dr. S. T., of Mass.—Hiccup can often be stopped by rapid breathing, by any sudden mental impression; by repeated and rapid swallowing; or by a plate of ice cream. Medicine need rarely be resorted to.

MARRIAGES.

CHUBBUCK—PRATT.—At the old home and residence of the bride's brother, C. A. Danolds, Esq., Eagle Harbor, N. Y., October 31st, 1881, by the Rev. Dr. E. E Chambers, of Albion, N. Y., H. S. Chubbuck, M.D., and Mrs. Elizabeth D. Pratt, both of Elmira, N. Y.

GUNTHER—WILKINS.—On Thursday, November 10th, 1881, at the residence of the bride's uncle, Mr. Joseph F. Sanxay, No. 97 Gates ave., Brooklyn, by the Rev. Wayland Hoyt, D.D., Dr. C. Eugene Gunther, of New York, and Julie, daughter of James B. Wilkins, of Brooklyn.

JENKINS—HALLOCK.—On Tuesday, November 15th, at the residence of the bride's mother, by Rev. J. R. Bryan, assisted by Rev. T. H. Stockton, Dr. Olin L. Jenkins, of Danielsonville, Conn., and Miss Rhoda Hallock, of Plainfield, N. J.

LAWSON—ECCLES.—On Wednesday evening, October 5th, 1881, at the residence of the bride's parents, by the Rev. J. P. E. Kumler, D.D., assisted by the Rev. H. L. Dickerson, Dr. W. T. Lawson, of Danville, Ind., and Anna M. Eccles, of Cincinnati, Ohio.

MANCHESTER—TARBELL.—In Bethel, Vt., September 28th, 1881, by the Rev. S. A. Parker, Dr. Frank C. Manchester and Minnie A. Tarbell, both of Lebanon, N. H.

McCONNELL—CULLEY.—October 13th, 1881, by Rev. Ross Stevenson, D.D., at the house of Mrs. Martha Ann Culley, the bride's mother, Dr. Samuel McConnell, of Wellsville, and Miss Almira Culley, of Florence.

McGEE—STRAUSS.—In the Presbyterian parsonage, in Carleton, Neb., October 13th, 1881, by the Rev. J. McC. McDonald, T. J. McGee, M.D., of Carleton, Neb., and Addie L. Strauss, of West Alexander, Pa.

DEATHS.

GAMAGE.—In this city, on November 3d, 1881, Dr. Theodore A. Gamage, aged thirty-nine years.

LESLEY.—In Newcastle, Del., November 7th, 1881, Allan Voorhees Lesley.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

DIGESTION.

BY HORATIO R. BIGELOW, M.D.,

Of Washington, D. C.

A very excellent practical article upon this subject, from the facile pen of Dr. J. Milner Fothergill, recently made its appearance in the *Practitioner*. It is not exhaustive physiologically, for it evidently does not aim to draw conclusions from actual experimentation. It is rather the dictum of a leading clinician who is entitled to speak *ex cathedra*. Whatever Dr. Fothergill writes will command attention, for his opinions are free from pedantry and backed up by clinical facts. The functions of the mixed saliva (parotid, submaxillary, sublingual, and that from the glands of the mouth, tongue and pharynx), are not yet thoroughly understood; but enough has been mentioned to justify the assertion that it has a certain action upon hydrated and dehydrated starch. The first fluid, as a factor in digestion, is the saliva. This is not simply a mechanical or lubricating agent, but a genuine digestive. There is a marked difference in the results of the experiments made by Bernard, Leuchs, and others, upon dogs and upon human beings. In the former amylaceous principles are transformed into sugar by the intestinal secretions alone. In man the mixed saliva "changes starch into sugar with great rapidity" (Flint). No logical inference can be predicated upon experiments made upon lower animals. Uncooked starch is more slowly affected by saliva than the granule cracked by cooking, yet *it is* slowly converted into sugar. To quote from Flint:—

"It is unnecessary, in this connection, to recite the numerous experiments on the influence of the saliva of the inferior animals on starch; but it may be stated as an established and generally accepted fact, that the mixed saliva and the secretion of the different salivary glands in the human subject, invariably transformed cooked starch into sugar with great rapidity, in the mouth, and also, at the proper temperature, out of the body. It has also been shown by Mialhe, that the starch, although it is rapidly converted into sugar in this process, is first transformed into dextrine. This point being settled, there arises the important question whether the action of the saliva be important in the digestion of starch, or whether this transformation be merely accidental; for it has been shown that other fluids, among which may be mentioned the serum of the blood, the fluid found in cysts, and mucus, have the same property, although none, except the intestinal juices, are nearly so efficient as the saliva; and, again, the quantity of starch contained in the food is so great that it would require, apparently, a longer contact with the saliva than usually takes place in the mouth, to make this action very efficient. These considerations make it necessary to follow the amylaceous principles of food into the stomach, and to ascertain, if possible, whether the transformation into sugar be continued in this organ. * * * * The question of the continuance, in the stomach, of the digestion of starch by the saliva is settled by the following observation by Grünewaldt and Schröder, in 1853, in a woman with a gastric fistula:—

"After a meal of raw starch, no sugar was found in the contents of the stomach, the acid juice was drawn by the fistula, and was mixed with paste; the transformation into sugar commenced immediately. As Bidder has observed, the transforming property of the saliva persists, even in the presence of free acids. A few ounces of starch swelled with boiling water were introduced into the stomach, fasting, by the fistula; immediately after, a portion of the starch was expelled again: already it contained sugar. A quarter of an hour after, a great deal of sugar was found in the stomach, and the paste had become entirely fluid.

"There can be no doubt that the saliva, in addition to its important mechanical functions, transforms a considerable portion of the cooked starch, which is the common form in which this principle is taken by the human subject, into sugar; but it is by no means the only fluid engaged in its digestion. * * *."

In the saliva we have the first ferment, the first requisite of digestion and assimilation. Recognizing this truism, we are more intelligently prepared to argue against rapid eating and insufficient mastication. The food ought to be properly triturated by the teeth. During this process it becomes mixed with saliva and passes into the stomach in a partly digested condition. This is an essential prerequisite of healthy digestion.

It seems to me that many cases that come to the Doctor complaining of gastric disturbances, flatulence, pain, and a sense of heaviness after eating, and for which bitter tonics, sulphate of soda, carminatives, etc., are prescribed, would be more satisfactorily combated by enjoining less haste in eating and a greater care in masticating the food. Thus prepared by the ferment of the mixed saliva, and partially digested, as to its starch, the food encounters the gastric juices of the stomach. Of this function, Fothergill writes:

"Under the influence of the gastric juice an insoluble albuminoid, a 'proteid' is converted into the soluble 'peptone.' As such it passes into the blood, where it at once passes back to the proteid form. This digestion into a 'peptone' is achieved by the addition of a molecule of water, and as soon as the soluble peptone has reached the blood it is dehydrated back to a proteid. This is the special function of the stomach, viz., to digest albuminoids * * * * *. Digestion is really solution. The gastric juice is the solvent of the albuminoid elements of our food." Now, the chief ferment of the gastric juice, according to Bidder and Schmidt, is pepsin. It is easily understood why physicians are given to prescribing pepsin, oftentimes indiscriminately, in almost all forms of gastric disturbance, and it is quite as easily understood why the results of such administration are generally unsatisfactory. Pepsin requires great care in its preparation, and is an expensive article of manufacture, if properly made. If the temperature be allowed to exceed a certain known limit, the whole mass becomes inert, and is useless as a medicine. To throw it aside would be to sacrifice a large amount of time and money, and hence, it is thrown upon the market, all insufficient though it be to accomplish any result. "A solution of pepsin in water, when acidulated with lactic, phosphoric, or hydrochloric acids, has the power of causing the solution of fibrin or albumen when kept at the temperature of the body; and the amount of fibrin or albumen dissolved by a given weight of the pepsin may be taken as an indication of the value of the medicine. A temperature above 130° Fah. injures or destroys the solvent powers of pepsin" (Garrod).

Pepsin is largely prescribed in atonic dyspepsia, but it is difficult to understand for what reason. Out of the body fifteen grains of Boudault's best pepsin will only dissolve sixty grains of dried fibrin. Combined with hydrochloric acid and lime its power is greatly increased. The digestion of starch is not arrested in the stomach, as the principles are mixed with the saliva, but the pancreatic fluid and the intestinal juices are the chief factors in its ultimate disintegration. Bernard very properly places the pancreatic juice at the head of the list of digestive fluids that act upon starch. Flint says: "To sum up the whole process of the digestion of starch, it may be stated, in general terms, that this principle, when hydrated, which is the usual condition in which it is taken into the stomach of the human subject, is slightly acted upon by the saliva, both in the mouth and after it has passed into the stomach. When it is taken raw, it is hydrated in the stomach and usually undergoes no transformation into sugar until it has passed into the small intestine; and when it passes out at the pylorus, mainly by the action of the pancreatic juice but with the assistance of the intestinal juice, it is transformed into glucose and in this form is absorbed." The bile acting as a general scavenger, but not as a specific digestive, often needs a little attention, and is acted upon directly or by contiguity of structure.

In the treatment of any form of dyspepsia we must consider, 1st. The condition of the teeth;

2d. The time occupied at meals; 3d. The condition of the stomach; 4th. The condition of the bowels; 5th. The nature of the stools; 6th. The symptoms; 7th. The age, habits and inherited tendencies of the patient. If the natural diastase be deficient in quantity, we add the artificial diastase, "maltine." The ferment or "diastase" of the mixed saliva is identical with the ferment of malted barley, the starch of the barley being hydrated into malt (Fothergill). The best results from the use of this artificial diastase "maltine" are gained by taking it *during* the meal, mixed with porridge, milk, or what I think better, good sour wine. It thus acts upon the starch before reaching the stomach, and increases the power of the actual diastase in the saliva. Alcohol is very useful in many cases, and absolutely demanded in others. Maltine being a sweet, syrupy compound, mixes well with sherry, and taken during a meal is pretty sure to aid digestion. Fothergill points out the mistake of giving it after the food has been taken and reached the acid secretions of the stomach, because both the real and artificial diastase are inert in the presence of an acid, and their power is lost. Where the tissue waste is great, and a constructive is called for, this artificial diastase may advantageously be combined with the peptones, and we thus bring to bear a digestive and a constructive.

Of pancreatic indigestion we know but little. Fats are taken as food, but pass away undigested. Neither the saliva nor the gastric juice have any hand in this transformation of fat. Having passed the peptones and made alkaline by the bile, the fats are saponified, and the starch not yet transformed into sugar by saliva is also acted upon again. The albuminoids, not digested by the gastric pepsin, are digested by the pancreatic trypsin, and "the fats are emulsionized so that they can be taken up by the lacteals in the villi of the intestines." The pancreatic secretion contains four principles:—

1. A ferment which changes starch into sugar.
2. Trypsin, which digests albuminoids in an alkaline medium.
3. A substance which will curdle milk.
4. Another substance which will emulsionize fats. (Fothergill).

It is this pancreatic dyspepsia especially that we have to fight in consumption. It is this imperfect assimilation of fat that "impairs interstitial digestion" in the body, or as Fothergill says in his article: "This impairment gives us those modifications of nutrition which are summed up in the word '*stroma*.' We know that if we can manage to enable a patient with pulmonary phthisis to digest and assimilate cod-liver oil, tissue nutrition becomes so altered that the development of tubercle is usually arrested. That is, we have once more given to growing tissue that fat which is essential to healthy formations. Call growths of tubercle by what name each man pleases, Virchow's broad view that tubercle is a growth of connective tissue corpuscles degraded in quality, while produced in great quantity, is the one to hold, in order to best grasp the subject from its therapeutic aspect. What we have to attempt to do, is to give to the tissues the fat without which they are not healthy." There's the rub. The ideal prescription for phthisis would be one which should be a digestive, a formative of fat, and a nutrient. Sulphuric ether is a known stimulant to the pancreas, and preparations of cod-liver oil and ether have been tried and tried again. It is a fact that may pass without saying, that cod-liver oil in any form is not generally well tolerated by consumptives. It impairs the last lingering of appetite, and is disgusting, nauseating and a powerful factor of evil in many instances. Its presence as a foreign body in the stomach excites the flow of gastric juice. It passes through the pylorus undigested and comes to the pancreas. The pancreatic juices are sluggish, the oil does not act as an excitant, and it passes out of the body unassimilated. We need something which will excite to action the pancreatic juices; so that saponification may ensue, and tissue waste be prevented. The nearest approach to this that we have made, is the addition to an artificial diastase of a natural pancreatic fluid, or diastase with peptones and pancreatine. In this way we supply an artificial ferment, a gastric irritant, a pancreatic excitant, a fat former and a digestive. In no other way can we improve "interstitial digestion." The only way to repair a broken-down lung is to make it partake of the general nutrition of the body. This can be best done, and only surely done, by attention to digestion.

THE HYGIENE OF THE EYE. AN ADDRESS TO PHYSICIANS.

BY CHARLES A. OLIVER, M.D.,
Of Philadelphia.

(Read before the Northern Medical Association, Oct. 28th, 1881.)

We, as physicians, in our endeavors for the well being of others, are apt to disregard our own demands, and totally neglect ourselves, even where there is cognizance of some defect or want in our system, and this is nowhere more

vividly shown than in the organ of vision. For this reason, which I may safely claim as sufficient, I feel justified in bringing before you this address, in hope that the hints here set forth may prove of value and service.

The conditions rendering an eye incapable of its proper functions in an easy unconscious manner, may be conveniently divided into two kinds:—

1st. All those which are extraneous or separated from the organism.

2d. Those dependent upon the system, especially the eye itself.

Before I shall give you these causes, it will be necessary, for the understanding of their proper signification, to explain the meaning of the terms accommodation and convergence. (This was chiefly done by the aid of a series of diagrams and sketches.)

Among the first, improper light is paramount. How many of us endeavor to read by insufficient illumination, either natural or artificial, causing an unconscious approach of the object to the eye, in the compensation of enlargement for indistinctness, thus producing a decided strain upon the ciliary and extra-ocular muscles in their efforts to maintain proper accommodation and convergence. This undue muscular effort means fatigue, and yet we neglect rest, continuing the strain until the muscles give out. I advise you all to give your eyes proper light, plenty of it; the diffuse, steady, white daylight.

Motion, especially when irregular and unrhythmical, is a second great factor. The overworked physician trying to steal a few disconnected phrases from a current journal, as his carriage jolts along; what is he doing? Exercising his ocular muscles in a variety of anatomical gymnastics; relaxing and contracting them in exact but unknown proportions, to keep the ever jumping word fixed upon his macula lutea—and then wonders, with a possible sage conclusion of general relaxation, last night's work—why his eyes feel so strained. Take the same individual and ask him to walk and balance himself on a slack rope for a few minutes, and he would most certainly refuse, and yet notice the parallelism. Your time may be valuable, but I venture to say, that the knowledge you acquire during traveling will barely compensate for the consequent eye-strain.

Improper positions may now be considered. To hold a book in such a position as to demand continued action of a comparatively unused extra-ocular muscle, means strain of that muscle. Take the oft attempted plan of reading while lying down or stooping. You can easily understand that in either of these cases muscular action will soon become unsteady. We should so hold our book that the muscles will be properly and evenly balanced. The best position being, that of the light coming from the left and behind; hence, always be careful to place your desk or writing table so that the light may fall over the left shoulder.

Do not hold your work too near your eyes, as here the accommodation and convergence will be overtaxed in the same manner as explained in the paragraph on insufficient illumination.

Never buy cheap reading matter, as it always means bad paper, imperfect and small sized type, improperly ruled and gauged. Choose a book with good paper, holding large, well printed, widely separated black words; and see that every page, if of any considerable width, is double columned. Nothing can be gained in the purchase of badly gotten up books.

Much has been said of the comparative values of the different kinds of artificial light; and there have been many attempts to substitute a light as nearly simulating daylight as possible: the requirements being steadiness, whiteness and brilliancy. It is generally accepted that the improved form of Argand lamp, using a pure refined oil through a properly trimmed wick; allowing the light to pass through a slightly blued transparent chimney, and then reflected on the work by a bluish or white shade, is doubtless the best we now possess.* How electricity can be so managed and reduced in its illuminating power, as to be applicable to general use, remains for the future to tell, although Dr. Leon Foucault, reports that recent investigations have shown that its use is productive of conjunctivitis, keratitis and retinal anæsthesia comparable to that produced by insolation.

In the second division of causes, among the most important, we may enumerate, first, the use of the eyes for near work, when the vital energies are not at their best. I advise you all to read or write during the morning hours. If you must read at night, never persist when you feel sleepy or overcome with fatigue, as the ciliary muscle and the extra-ocular muscles will have a disposition to relax, and hence, proper accommodation and convergence will not be maintained—thus producing decided exertion and consequent strain.

It is a good rule to frequently interrupt all

* It is a good plan to have the upper half of the chimney rendered translucent by grinding, so that the movable tips of the flame may be hidden.

near work, so that we may give the muscular apparatus rest—remembering that the ocular muscles work just as hard in a two hours' reading, as do the leg muscles in a two hours' walking.

Every man, from age, loses, more or less, his power of accommodation, that is, loses tone of ciliary muscle, accompanied by senile changes in his refractive apparatus—merely a local expression of a general want of tonicity—true decay. This is termed presbyopia or old sight. Then it is that he must compensate for this loss by artificial change of refraction—by the use of artificial lenses—spectacles. Do not for a moment think that anything can be gained by the postponement of their use. When, through age, you find yourself unable to read as you were wont, fit yourself with a pair of spectacles; and by so doing, there is no reason why your eyes shall not be capable of comfortably doing much near work.

A matter which may seem trivial, is ventilation during the use of artificial light; but when we consider the double combustion of oxygen, it really becomes a matter of great importance. Dr. Carter, in his little work on "Eyesight, Good and Bad," says, he has found that the evil effects of direct radiation can be easily prevented by the interposition of a transparent screen, containing a substance nearly impervious to heat rays. He had a large, flat glass cell filled with a saturated solution of alum in water; and found, by actual experiment, that it intercepted 26° of heat, without becoming sufficiently warm itself to radiate in any appreciable manner. This suggestion is of great practical importance and well worthy of trial.

I shall now speak of the so-called injurious effects of the microscope. In its employment, we must be guided by several important rules:—

1st. Never prolong its use.

2d. Frequently interrupt work.

3 l. Alternate the use of the eyes.

4th. Avoid a stooping position of the head.

5th. Choose good, steady illumination, either natural or artificial.

If these rules are faithfully carried out, it cannot cause injury.

Remember that no eye, however good its condition, can be safely used with impunity. We often hear of a pair of eyes capable of almost incalculable strain. Carefully follow that pair of eyes through their life's journey, and you will most certainly find a time when they will break down.

It is my belief that much better scientific work would be done, more comfort experienced, and many absolute dangers avoided, if our eyes were properly and regularly worked; carefully exercised and frequently rested; while taking due care not to allow the progression of what appear trivial conditions.

NOTE.—Extensive use has been made of the works of Harlan, Carter and Mitchell.

1507 *Locust street.*

HOSPITAL REPORTS.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC OF DISEASES OF THE MIND AND NERVOUS SYSTEM.

BY PROF. WM. A. HAMMOND, M.D.

Reported by H. H. SEELYE.

Hypnotism.

CASE 5.—The clinic was occupied with the exhibition, by Prof. Hammond, of several cases of so-called hypnotism.

Prof. Hammond began by stating that the students had already seen several subjects put into the hypnotic state; referring to a number of women whom he had previously exhibited at the clinic. So without stopping to describe the condition, he went on to give a brief history of hypnotism, up to the present time. The subject, he said, was first brought to the notice of the world by Mesmer, seventy or eighty or more years ago. He published an account of his discovery, and of its medicinal value, in a book called "Animal Magnetism." The subject did not especially interest the profession at that time, and so he and it fell gradually into disrepute. He started with a wrong theory, and hence was false in his deductions. He claimed that there was an influence which emanated from him, which he called "animal magnetism," and this overpowered the nervous energy of the patient, who then came entirely under his control.

Mr. Braid, of Manchester, Eng., was the first to investigate this subject scientifically. He proposed for this state the name of "hypnotism." The patient was brought into the condition in practically the same way as is now generally done. He simply attracted their attention, and kept it fixed on some bright object, held near the eyes, and they then soon became subject to his will. But he too was classed as a quack, and not listened to by the profession.

The subject was then taken up by a class of men who called themselves "electro-biologists," and who went about the country giving exhibitions. After hypnotizing the subject, they would suggest to him what emotions he was to express, by placing the fingers on the part that was to be influenced. So uniting their knowledge of phrenology to this condition, they would suggest acts expressing ambition, anger, love, and so forth, by touching that portion of the skull which was supposed to be over the seat of these emotions in the brain. While these people were exhibiting in England, they attracted the attention of Dr. Carpenter and others, who carefuly reviewed the

whole subject, and the opinions arrived at by them are those which have generally been held up to the present time.

The history being completed, Prof. Hammond then continued his remarks, to the following effect: He wished to impress upon us, to-day, the fact that nothing goes out from him as an emanation. The success of the experiment rests wholly upon the one subjected to it, and not on the one who subjects him. Any one else could bring on the condition as well as he. Not all people are sensible to this influence, but on the average only about two men in ten, or four women in ten. We can put the subject into the hypnotic condition by anything that will attract the attention through any one of the senses. Thus he can be influenced either through the sense of sight, hearing, or smelling. Many people have the power of bringing themselves into this condition, by looking fixedly, for a time, at any object, or at another person. The simplest way of hypnotizing a subject is to hold a small piece of glass, such as is often seen on chandeliers, before his eyes. Brightness of the object is, however, not essential. This is shown by the fact that while hypnotizing a patient the other day, by holding a piece of paper before him, Prof. Hammond made him think that it was the devil he was looking at, when he immediately sprang at the paper, and in struggling to get it away, so tore his hand as to make it bleed, and he became so excited that it was necessary to bring him out of the condition. But when the injured hand was shown him, the act of gazing upon it put him immediately into the same state again.

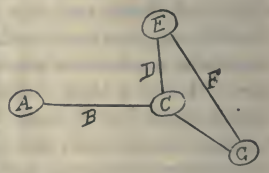
The same thing is true of animals as of men. In the summer time, when crabs are most lively, they may be hypnotized by standing them on their heads; and their legs could now be lopped off, without their knowing it. In cold weather they are too stupid to be influenced thus. Frogs are good subjects. They should be squeezed gently behind the head, and then thrown upon their back upon the hand or table. They can now be ripped open, and yet they will not move. Naturally, they are most restless and active when turned on their back. A Jesuit priest discovered that he could hypnotize a chicken by holding a white cord in front of it on the table. He attributed this effect to the great imagination of the hen, and he believed that she supposed she was still tied to the string. But a few years ago Czermak made experiments with crayfish and hens, and he showed that the same thing could be accomplished by a chalk line drawn in front of the hen's beak. So it could not be due to imagination. Moreover, it may be done almost as well when nothing is put before the hen. It is only necessary to hold her beak down upon the table for a few moments, when she will become completely inactive, as if asleep.

Professor Hammond now exhibited, what he said was a very savage hen, which he hypnotized yesterday, without putting anything before her to look at. He could then roll her about in any manner, without annoying her. The experiment succeeds better with wild fowls than with those which have become tame by domestication. The hen was now placed on the table before the audience, and a chalk line was drawn from her beak forward a few inches. In about half a minute she became partially hypnotized, and was rolled over. But this brought her out again. The experiment was repeated, and she now laid quietly on her back, in the Professor's hand. She was then returned to her bag.

Professor Hammond now said that, before experimenting further, he would try to explain to the class the manner in which he thought hypnotism was produced. But "hypnotism," is not a proper name for this condition. It is not a state of artificial somnambulism.

The subject is in a condition where the mind is capable of being affected by another person, through words, or other means of suggesting anything. Any suggestion will then be enough to influence him to act accordingly. This condition is not exactly that which the word "hypnotism" expresses; but it is analogous to it. Neither is it a state of artificial dreaming; for in dreams we generally remember afterwards what was said and done. I think that I have at last found a word which exactly expresses the condition presented in these cases. There is a Greek word "συγγιγνωσκω," which means to agree with another person's mind. This is what these subjects do. So the state may very properly be called "suggignoskism."

We will now see what is the probable mental condition while a person is in this state. By following this diagram you will have the explanation. Suppose *A* to be any organ of sense, for instance, the eye. *B* represents the nerve filaments, which carry sensations to the optic thalamus *C*, where, probably, the sensations are converted into perceptions. *D*, represents nerve filaments going from the optic thalamus, to the cortex *E*, where the individual becomes conscious of the perception. From here another impulse is sent along the fibres *F*, and reaching the muscles at *G*, causes the performance of some act. Suppose, for example, the subject sees a rat. The sensation from the eye at *A* is carried along the nerve *B*, to the optic thalamus *C*, and now the rat is perceived, and an impulse is sent along the filaments *D*, to the cortex *E*, and here the man becomes conscious that he sees the rat. Now, if a feeling of revulsion arises, a motor impulse is started from the cortex along the nerve fibres *F*, to the muscles at *G*, which go through the movement required, such as kicking at the rat. But now, suppose the cortex *E* is removed; there can then be no consciousness of the perception which is received at *C*. In this case a motor impulse is started through a different set of nerve fibres, and goes directly from *C* to the muscles at *G*, and causes the same act that would have followed had the impulse taken its normal course. Yet there is no consciousness of the act. Hypnotism, we thus suppose to be a condition in which the cortex is, for the time being, eliminated from the mental act. The person in the same condition as if he had



no cortex. But the spinal cord, as well as the optic thalamus, is probably capable of receiving impressions normally. So though the cortex is asleep, yet the spinal cord and optic thalamus remain awake to receive impressions transmitted by the senses. These patients are probably in essentially the same condition as is the frog whose head has been cut off. But with the loss of his head the frog can only be influenced through one of his senses, that of touch. Now it is known that if the frog, while in this condition, is subjected to irritation, as by a drop of acid applied to any part, he will move his legs in a perfectly rational manner, to brush away the irritating substance. So the frog knows what he is doing, through the medium of the spinal cord. But the human subject has a much larger spinal cord and optic thalamus than the frog, and he also has all his senses intact, through which to receive influences. These influences are received by suggestion, through any sense, and transmitted to the spinal cord or optic thalamus, and from there motor influences go out, and cause rational actions according with the suggestion. Yet the patient is all the while unconscious, because the seat of consciousness, the cortex, is not influenced. So in the condition of hypnotism, it seems that the cortex is cut off from acting, and the optic thalamus and the spinal cord alone are active.

Prof. Hammond now proceeded to hypnotize in succession the four young men who sat in the amphitheatre. There was nothing remarkable about their appearance. The first subject, Mr. H., was seated in a chair, and a small piece of glass was held before his eyes. In about five seconds the glass was drawn away from him, when he immediately arose and followed it wherever it was carried, and he seemed to endeavor to get his nose as near it as possible. Prof. Hammond then said, "You see now how serpents charm birds. He follows this glass wherever I go, and keeps his eyes fixed upon it, just as the bird does upon the serpent. This is a good example of charming. Notice also the change in his features; how earnest he is." The glass is then suddenly holden from his sight and he thereupon looks blank, and searches eagerly about for it. A large, suspicious looking bottle, is now produced, and he is told that it is a very pretty young lady. He thereupon steps back and looks admiringly upon it, his face beaming with smiles. He is told to go walking with the young lady, and he then takes the bottle gallantly on his arm, and walks about, talking to it. When told to, he asks if she will go home with him, and if she will marry him, and be his wife, and so on. "I will now show you that he is not shamming," said Prof. Hammond. He thereupon stuck the blade of a lancet through a fold of the skin of his hand telling him that it was a bouquet of fine flowers. He did not seem to feel any pain, and admired the supposed flowers until they were removed. He is then told that the bottle under his arm is not a young lady, but an ugly old woman, seventy-five years of age. He looks disgusted, and drops the bottle, and will have no more to do with it. He is then told that a large lemon is a nice ripe strawberry. A piece is cut off and given to him, which he eats with seeming enjoyment, and says it is nice, and he wants more. Not a muscle showed any of the signs which usually follow taking anything sour into the mouth. Several small lumps of alum were next put into his hand, and on being told that it was chocolate-caramel, he chewed and swallowed it with as much apparent pleasure as before. Its astringent action on the mucous membrane of the mouth was manifested in no way by the patient.

These experiments, so far, had proved that the senses of sight and taste were modified by this condition. The sense of smell was next tested. A match was lighted, and while the sulphur was still burning, it was held close under his nose, and he was told that it was good Cologne. He said, "it smells nice, but is strong, though." A bottle of ammonia is then put to his nose. He smells of it, but with some hesitation. When told that it is only clear water, he pours some on his hands and rubs them together as if washing them, and says that it is water. The ammonia caused watering of the eyes, as is usual, which showed that the normal reflex nervous actions were not abolished. Being told "there is a man over there who says that you don't speak the truth," he goes angrily up to the man designated, and preparing to fight, says: "You say I don't speak the truth? I'll clear you right out!" When told that it is not that man, but another one standing opposite, he rushes at the supposed enemy, saying: "I'll just settle you!" and proceeds to do so, in the most vigorous and passionate manner. While three or four of the bystanders are endeavoring to hold him back from injuring his opponent, by the violence of his struggles he is brought to his senses again, looks surprised and sheepish, and immediately being conscious of the taste of the alum and lemon which he had eaten, he goes directly to the water faucet, and rinses his mouth. He says he does not remember having eaten the lemon, but now tastes something sour in his mouth.

Mr. W., the next subject, was hypnotized in the same manner as the preceding case. His face, however, became immediately flushed and livid, and had a very earnest expression. He was first shown a magnet, which he was told would draw him wherever it went. He was then led about by it, and when held above and back of his head, he would bend far back, so as almost to fall, in his endeavor to keep his eyes upon it. "In this way, I might bend him double with it," said Prof. Hammond. Then to the patient, "If I turn the other end of the magnet toward you, you will be repelled by it." On reversing it, the patient fell backward on the floor, as if shot. A book was now substituted for the magnet, and precisely the same effects were produced. This book was next said to be a very pretty bird, which he took tenderly in his hands, and gently caressed. He was then told to sing to it, the "Sweet by and by." While singing, the book was taken from him suddenly, and he was told that it was gone. He stopped, and looked anxiously around, to see where the bird had fled. Pointing upward, Professor Hammond said, "there it goes. It is flying about the room up there." Quick as a flash he sprang over the railing of the amphi-

theatre, and rushed up among the audience, in pursuit of the imaginary bird, quite oblivious of the fact that he was trampling upon the students, who seized him and tried to hold him back, while he made frantic efforts to climb one of the iron supporting pillars, in order to attain his end. He was with difficulty stopped, by placing the book again in his hand, and telling him that the bird had come back. He appeared much pleased at recovering it. Professor Hammond now said, "This is a colored Baptist congregation before you, and you are a colored clergyman; give them a sermon. Thereupon, assuming a ministerial attitude, and making a bow, he reverently spoke as follows:—

"My colored friends. We meet here to-night on this grand subject. We come here to see what good we can do for the wicked; and I think it is the place of every Christian in this congregation to work, and not to stand idle. We don't want to see you sitting in your seats here; but go into the rear of the church, and talk to those wicked sinners there. My Christian friends, while you see me talking, and you are sitting quietly in your seats, why don't you go out, and take those sinners by the hand, as you ought to do, and lead them in!" The Professor here interrupted him by saying, "There is a very sinful woman sitting there, go and try to convert her." He hesitated a moment, and then said, "I don't like to stop in the midst of my sermon, but I hope some of the sisters will go and talk with her." He then resumed his sermon; but was again interrupted by Professor Hammond, who told him that he was not a clergyman, but an actor. He then assumed a most tragic attitude, and after a moment, fell heavily forward on his face, upon the floor. Then raising himself partly, and resting on one arm, in a low voice he began thus:—

"It was not I who did it, but I know who did it. And when I get out of this prison, I will make him suffer for it." And then he became excited, and shouted, and rushed wildly around, so that it became necessary to bring him out of the condition, to make him stop.

Before hypnotizing the next subject, Professor Hammond said that in order to show that there was nothing in him which influenced the patients, he would let some one else hold the glass. So one of the gentlemen near by took it, and holding it before the eyes of Mr. W., he was soon hypnotized. Professor Hammond then said to him, "you are Macbeth. Now get up, and recite Macbeth to the audience." Then with appropriate gestures and actions, he began as follows:—

"Go bid thy mistress when my drink is ready she strike upon the bell. Get thee to bed. Is this a dagger which I see before me, the handle toward my hand? Come let me clutch thee;" and so on to the end of the passage. But Professor Hammond meanwhile showed that he could stop him at any point in his speech, by touching him upon his left temple. But when touched over the right eye he would go on again, from the place where he left off. This was repeated several times. Then interrupting him, the Professor said: "You are now Col. Ingersoll." Thereupon, assuming an off-hand air, with his hands in his pockets, he repeated a long passage from one of Col. Ingersoll's speeches. He was again stopped, and told that he was not Col. Ingersoll, but a sound regular orthodox clergyman. He then began thus: "My dear friends, I come forth to night, to try and convert some of the wicked souls in this audience. Here, in this house of God, it is fitting that we should have our hearts in our hands, and listen to the words of truth, and we should not be asleep. If there are any young men in this audience who are in the habit of visiting places of bad resort, I would say to them,"—here roars of laughter from the listeners drowned out the speaker's voice. He was then handed a bottle of water, and was told that it was whisky, and after drinking it, that he was getting drunk. He then continued his sermon, but spoke disconnectedly, like a drunken man, and finally was overcome, and ending his remarks with, "come boys, let's go and have a good time," he sank down into a chair. He was then told, that he was very sick at the stomach, and forthwith he appeared so, and seemed about to throw up the supposed whisky which he had taken. And as his pains increased he groaned out in great distress, "I've got the cholera morbus. O! send for a doctor." He was then told that a glass of water would sober him, which he drank and soon felt better. When told that his whole body was rigid and stiff as a board, his muscles all became so, and he was laid, while in this condition, between two chairs, his feet resting on one and his head on the other. He was again lifted up from this position, but not a muscle relaxed. When told to do so, he limbered up again, and walked about.

He was next made to represent Benj. Franklin, and he spoke at great length about the progress of electricity, and its benefits to civilized society, placing a book before him, which he supposed to be an electric battery. While he continued his speech, the fourth subject, Mr. P., was hypnotized. He was then led up to Benj. Franklin, who offered to give him a shock from the battery. He took what was supposed to be a strong shock, and it knocked him over. The lecturer thereupon cried out, "Is there any other gentleman, who would like to step forward and take a shock," and then went on with his lecture upon the virtues of electricity; quite unannoyed by the roars of laughter from the audience, caused by the exhibitions of Mr. P., who, believing that a rat had run down his coat, and then under his vest and other clothing, quickly tore off these articles of apparel, in search of the rat, and when finally told that it was in his coat on the floor, he stamped upon it vigorously, in order to kill the animal, and consequently presented a very ludicrous appearance. Benj. Franklin is now stopped in his lecture, and is told that there is a thunder storm coming up, and suddenly, that a flash of lightning has struck him. He instantly falls back on the floor and appears as if dead. Soon a piece of lemon is handed to him, and Prof. Hammond says, "Now eat this strawberry and it will bring you to again. He eats it and returns to life. A piece of the lemon is also given to the other, who is now dressing, and he thinks it is a good strawberry. And when he has put

on his vest, he is told by Prof. Hammond that he cannot button it, and though he tries persistently to do so, he does not succeed. His companion is meanwhile told that he cannot step over a cane placed upon the floor, and he endeavors in vain to do this. He is then given a glass of water, and is told that it is chloroform, to anæsthetize him and put him to sleep. He drinks it, and soon breathes rapidly and falls over as if insensible. He is then brought to his senses again by the Professor snapping him over the left eye with his fingers. He thereupon gets up, looks surprised and returns to his seat. The other subject has all this while been trying, without success, to pick up the cane, which he was told he could not do. Then, Prof. Hammond, placing a bottle on the table, said, "Here is a man who says he can lick you; hit him with a snowball." He thereupon made an imaginary snowball, and threw it; but was told at the same time, that he had himself been hit. He fell as if knocked down by a snowball, but getting up again, he rushed, in a rage, at the bottle. He was stopped, however, and held back. Being told that it was a very warm day, he took out his handkerchief and wiped the perspiration from his face, and removed his coat and vest, in order to cool off. And when he was handed a small piece of wood, and was told that it was a handkerchief, he used it to wipe his brow. He is next given something which he is told is whisky, and he then plays the part of a drunken man so faithfully, as to raise the suspicion that "he has been there before." He is then led away to the station house by a supposed policeman. Prof. Hammond then tells him that he is sick at the stomach. He immediately sits down and appears in great distress, and when a headache is added to his other troubles, it seems as if he would discharge the cause of all his woes upon the floor, but does not succeed. Prof. Hammond says that he can sometimes be made to vomit by such suggestions. He then says to the patient, "take this piece of honey and it will set you all right." Then he says, "you are getting better; you are all right now—you are a clown in a circus." The newly-made clown thereupon shouts, "bring on the balloons, now!" and cracks the traditional jokes, dances a jig, and when told that a chair is a horse, he straddles it, and keeps up motions as if trotting, and strokes the horse's neck. Being thrown from the horse, he again mounts him with a leap, strokes him, and says soothingly, "hold on now, Bismarck." He then stands up on the chair and rides bareback, balancing on one foot. He finally dismounts and makes his bow to the audience. He then cracks more jokes, and makes comical remarks like a clown, beginning with, "Tell me, sir, the difference between a baby, a monkey, a bald-headed man, and an orphan boy. You can't! Well, it's this: One's an heir apparent, one's a hairy parent, one's no hair apparent and one has ne'er a parent." He then tries to make the monkey, Jocko, jump through his hand. Being next told that he is an organ grinder and to sing a tune; he appears to be turning a hand organ and he accompanies it with a song. When touched on the forehead he stops the song, but continues the motions with his hand. When again touched over the eye, he re-commences his song at the place where he stopped. A lancet is next thrust through his skin on the hand, which he does not appear to feel. He is then told that his body is stiff, and while the muscles are thus rigid, Prof. Hammond shows how they will remain in whatever position they are placed, as in catalepsy. Any muscles rubbed by his hand contracted, and remained thus until released by rubbing their antagonist muscles. His stiffened body is then laid between two chairs, as in the previous case, but only one foot rests upon one chair, while the other leg and the arms are elevated. He remains in this position until he is struck over the eye and thus brought back to his senses.

Prof. Hammond next hypnotized two of the subjects at the same time, and both together strove to keep their noses near the glass, and would even jump for it, when held above their heads. Their noses were touched by a piece of cork, which was supposed to be red hot iron, and they appeared as if severely burned. A nose thus burned off was restored by an imaginary piece of ice. One, when told that his coat, and then his vest and trousers were on fire, quickly stripped off each in succession, and threw them away. The other is next asked to make a speech, and he talks for some time, making witty remarks. He can be stopped at any moment by rubbing over his eyes or any other part. Yet, though he makes no sound, his mouth continues to move, as if speaking still. When touched again, he goes on with his talk. He is then supposed to be Geo. Washington, and the other is introduced to him as Thomas Jefferson. But he is provoked at thus being interrupted in his remarks. One calls the other a liar. They get angry and strip for a fight, and rush at each other like wild cats. Seven or eight men can scarcely restrain them from injuring one another. In the struggle one comes out of the hypnotic state. The other still wants to punish him, and calls him a humbug. He then, at the word, falls asleep, and again awakens, smells of a bottle of ammonia and calls it cologne. A piece of wood, said to be red hot, burns his fingers. A small bottle is then held before him, and he is told that it is an angel. He immediately drops upon his knees before it, folds his hands in front of his face, in a reverential manner; all his religious emotions seem to be awakened, and his actions become almost hysterical in character. He seems completely awe struck. There is, however, a sudden revulsion of feeling, when he is told that the angel is a big black dog. He quickly jumps up from his knees, and leaps over the railing and rushes up among the students to escape. He is carried back again, and told that the dog has bitten him and that he has the hydrophobia. He thereupon rushes about wildly and appears as if mad. But though told that people with hydrophobia generally bark, like a dog, he does not do this. His ravings soon become so violent that he is with difficulty restrained; but with the magic words "all right," from the Professor, he is himself again.

Prof. Hammond now closed the exercises of the afternoon with the following remarks: "Gen-

tlemen, you can yourselves repeat these experiments as well as I, at any time. As you have seen, there can be no shamming here. Any number of severe surgical operations can be performed on a patient in this condition. It is as good as an anæsthetic for abolishing consciousness; but it is not available generally, because so few are subject to its influence. This is, scientifically considered, one of the most important powers of nature, and one about which little is as yet known. Some people can pass into this condition of their own accord, and may thus commit crimes unconsciously. A subject, when hypnotized, can be made to perform any criminal act, such as murder, or setting fire to a building, and the like; and he will plunge recklessly into any danger."

In illustration of this fact, one of the subjects was again hypnotized. A piece of paper rolled up was then given him, and he was told that it was a dagger, and that he must kill a man who was standing near him. He hesitated a moment, and then sprang on the man like a tiger, and plunged the supposed dagger into him again and again. He was then dragged off from his victim. Next, a paper was placed on the floor, and he was given a match, and told to set fire to that house. He lighted the paper, and then drew back with a smile, and admired the flame he had made. He was then restored to his senses.

Each of the four subjects was now asked if he remembered anything that was done while he was hypnotized. One replied, that he remembered a little only. The other three remembered nothing of what transpired.

This closed the exercises of the afternoon, and the class was now dismissed.

Medical Societies.

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Abstract of Paper by Dr. T. A. McBride, on the Early Diagnosis of Chronic Bright's Disease.

The author began by saying: I invite your attention, to-night, to the means at our command for the early diagnosis of chronic Bright's disease. I shall consider the diagnosis only of the forms of chronic nephritis which begin insidiously and progress slowly. The form which we shall encounter most frequently with this understanding is the cirrhotic, granular, or atrophic kidney. But there are certain cases of chronic parenchymatous nephritis, and a very considerable number of cases of chronic diffuse nephritis, particularly of the large white kidney, which begin as insidiously and progress as slowly as the atrophic kidney. The signs and symptoms of the atrophic are common to the other forms of chronic nephritis, and the differential diagnosis is not certain, and is even impossible. One can only say that the longer the disease continues the greater are the probabilities that the atrophic kidney will be found at the post-mortem.

I ask your attention first to the symptoms and signs present in a well-marked case of chronic Bright's disease, which has existed for some time, and in which extensive œdema or anasarca has not appeared.

Next, I shall consider a class of cases in which no symptoms of the disease appear until the patients meet with an accident or injury, or are attacked with some disease, as pneumonia, or a tonsillitis, and also to certain other diseases in which the health has been perfect heretofore, and the disease is ushered in by a convulsion, by a coma, by a fever, with head symptoms, etc., and the diagnosis of the disease under these conditions.

Thirdly, I shall present the histories of five cases, seen by me in the last eight years, and in which a condition of lithæmia terminated in chronic Bright's disease.

Fourthly and lastly, I shall call attention to the very probable fact that chronic Bright's disease, and diseases of the arteries, are produced most commonly by the circulation and the elimination of certain excrementitious material present in the blood.

Symptoms and Signs of Chronic Bright's Disease.—Headache, usually persistent, frontal, vertical, occipital; deafness; amblyopia; dyspnœa, of which we have two varieties, spasmodic, Cheyne-Stokes; heart disease, emphysema and chronic bronchitis; hydrothorax, œdema of the lungs, etc.; dyspepsia, with great flatulency; nausea and vomiting; abdominal colic, usually coming on at night, with pains about the umbilicus, and with or without diarrhœa; dysentery; pains in the lower extremities, with or without cramps, and numbness of the extremities; trifacial neuralgia; insomnia; vertigo; frequency in urination, especially during the night; palpitations, pain over præcordia, often with a sense of faintness (slight attacks of angina pectoris); pain in the lumbar region; constipation; lassitude; muscular pains; coldness of the extremities; tendency to laryngeal and tracheal catarrh; epistaxis.

Signs.—Great pallor of the mucous membranes; baldness of the head; gray hair and dryness of the hair; tortuous temporal arteries; so called staring eye of Bright's disease, with pearly conjunctivæ; sub-conjunctival œdema; peculiar odor of breath; emaciation; slight œdema of the legs, but since many persons in health have pitting over the shins, this must be carefully investigated in other portions of the body; the urine—and under this head Dr. McBride quoted Bravais, to the effect that urine, in chronic Bright's disease, is free from all odor peculiar to urine; he also referred to frothing of the urine; frequency of passing urine, particularly at night. The amount of urine passed in the twenty-four hours is the most important factor in the diagnosis of chronic Bright's disease. It may be stated as a general fact, that the longer the disease continues, the greater is the quantity of urine excreted, and it would be a factor in the diagnosis, to find that the amount continues much below the normal quantity excreted, or that the amount was much in excess of the normal quantity excreted. In the form of chronic parenchymatous nephritis, the amount passed is usually below the normal, and may be as low as ten to twenty ounces in twenty-four hours, and for a considerable part of the disease, as much may be passed as by a healthy

person; and it is observed that a small quantity passed for some days may be succeeded by a normal amount for some days, or longer, and then a smaller quantity. The longer the disease lasts, and the more that the pathological changes pass into those of chronic diffuse nephritis, especially of the small variety, the greater becomes the quantity, and the less frequent are the reversions to a small quantity.

In chronic diffuse nephritis the quantity is small at first, may be, perhaps, suppressed, then returns to the normal quantity, and at the end, perhaps again suppressed, but the longer the patient lives the greater becomes the amount of urine secreted. This does not continue uninterruptedly, since it may become less than normal or of a normal amount, or even suppressed, but the longer the patient lives, the greater the probability that the amount will increase, until, if death does not occur, it becomes much increased, barring accidents. It may be said that whether the case before us comes as a case of chronic Bright's succeeding an active attack, or as a case of Bright's primary, that we may have at first urine normal in quantity or very seldom wanting in quantity, and usually much increased, one should always bear in mind that any cause leading to a diminution in arterial tension, any cause leading to over-distention of the right side of the heart, any hepatic affection or pyrexia, or, perchance, certain abdominal diseases, may lead to reduction in the amount of urine to the normal or below. Nevertheless, a careful saving of the amount of urine passed in twenty-four hours is an important aid in attaining the diagnosis of the disease, and it must be impressed upon the patient that all of the urine passed should be saved.

The Specific Gravity.—This is a very important sign. First, in chronic parenchymatous nephritis, the specific gravity is only characterized in not differing much from the normal. It may be normal from 1.020 to 1.025, or even higher, 1.030 to 1.035, and again may range from 1.005 to 1.020. In chronic diffuse nephritis the specific gravity is regularly below the normal, often much so. It is usually below 1.020, and often, unless some reason to the contrary, 1.010 or below. There are, however, some exceptions: in the large white kidney, although regularly below that of health, there will be times when it will be normal or even above. The chances in favor of low specific gravity are always much in favor of chronic diffuse nephritis as compared with chronic parenchymatous nephritis. In the atrophic form the specific gravity is regularly below the normal, and yet it may have a normal specific gravity for weeks and months.

After quoting from various authors Dr. McBride continues:—

One may say, then, of the specific gravity, as was said of the quantity of urine, that the longer the disease has existed the lower will be the specific gravity, and that in the estimation of this in any stage of the disease it is necessary to consider the causes or conditions present which may produce an increase in the specific gravity. The color of the urine is usually pale.

Albumen.—In chronic parenchymatous nephritis albumen is usually present. The quantities vary from time to time. For days and weeks there will be from 50 to 80 per cent. of albumen in the test tube, and then for some time only normal quantities will be present. In chronic diffuse nephritis it is present in varying quantities, from a little to a good deal. The urine of the large white kidney always contains albumen, and usually in large quantities. The small kidney, the one that we have particularly to deal with, often contains no albumen at all, or only occasionally.

The presence of albumen, then, in the urine becomes often a valuable symptom, and in attempting the early diagnosis of chronic Bright's disease, one should examine, for albumen, the first urine passed in the morning, the urine after each meal, and the urine on retiring at night. If albumen is abundantly present in the first specimen that is examined, that is sufficient, but if it is not present it must be sought for in each specimen passed. Very often it is only present in some one specimen passed in the day. It may be in the early morning, or in the specimens passed after meals, but very often is found in urine passed at bedtime after the fatigues of the day. As Murchison has pointed out, in lithæmia, or suppressed gout, when the early structural changes are perhaps just beginning in urine of a high specific gravity, and loaded with urates and uric acid, albumen is often found to be present at this time. Albumen, however, has been found to be present in the urine under circumstances in which the patient is apparently healthy. This has been referred to by Sir William Gull, Moxon, Leube, Ultzman, Bamberger, Clement Duke, Saundby, and also by Munn of this city. It has also been observed by many observers in the course of the exanthemata, in pneumonia, after an attack of epilepsy, etc., where there was no kidney disease. The explanation for the transient appearance of albumen is probably one of the following, and there are probably cases occurring under each head:—

1st. In certain cases the urine is loaded with uric acid, oxalates, etc., and it has been suggested that active irritation or increased hyperæmia has been produced in the kidney by the elimination or excretion of this substance, and the albumen has resulted from that.

2d. In other cases there is a vaso-motor paresis, as has been suggested by Bamberger in the Vienna *Gesellschaft der Aerzte.*

The researches of the state of the ganglionic centres in Bright's disease, by J. M. Da Costa, M.D., and Morris Longstreth, M.D., PH.D., *American Journal of Medical Sciences,* July, 1881, makes this much more probable.

It is difficult to give albumen appearing in this manner in the urine of persons apparently healthy, its proper value. The question is, has it any significance at the present or in the future? I have been accustomed to decide the question in the following manner: if there is a strong heredity of Bright's disease, and if the patient has a pulse of high tension, and has perhaps one of the diseases resulting from high tension, or which is often associated with Bright's disease, I think then that I am justified in stating that this is a symptom of beginning structural disease of the kidney. Otherwise, if these con-

ditions are not present, the appearance of the albumen is of no special significance pathologically.

Tube Casts.—The presence of casts of the tubules of the kidney in the urine is not regarded as of the importance once thought. It is doubtful whether casts, or at least any number, are obtained from that portion of the kidney beyond the "down-looping" tubules of Henle; that is, from the labyrinth of the kidney, the origin of the convoluted tubes and Malpighian tufts. The tube casts are, apparently, entirely derived from the excretory portion of the kidney, that is, from that portion of the tubules which extend from the large convoluted tubes at their termination in the down-loops of Henle, or from the beginning of the narrowest portion of these, to the point of termination of the tubules in the papillæ. Cast matter from the labyrinth may, by considerable pressure and the consumption of much time, possibly be forced from the loops of Henle, which are elastic; but it is doubtful whether many casts are carried through in this manner. Rindfleisch states that casts are formed only very occasionally in the convoluted tubules, that when convoluted casts are found in the urine, they receive their tortuous shape from the intermediate, or connecting piece of Schweigger-Seidel. Moreover, from the condition of the casts, whether fatty or granular, one cannot predicate the condition of the kidney, unless casts exist in very great numbers, for one cannot tell how long they may have remained in position, or how long in transit. One can say this of their position, or value in diagnosis, that their absence does not indicate absence of a nephritis; that their presence in moderate quantity betokens the existence of some degree of nephritis, and that their great number proclaims an extensively diseased condition of the kidney. The signs already specified, particularly the amount of urine, the specific gravity, and the presence of albumen, are apt to afford more value in arriving at a diagnosis than the casts. The presence of casts is simply of corroborative worth.

Deposits in the Urine.—These are in themselves, excluding casts and so on, but of little importance, yet the crystals of uric acid and oxalate of lime undergo some alterations in appearance, and in the presence of colloid matter, such as mucin and albumen, one's suspicions may at least be excited by their appearance, and a more careful examination of the urine will then be made for the presence of the albumen.

Increased Arterial Tension.—This is at present regarded by many as the most constant and most valuable symptom of Bright's disease. It is present both in the acute and the chronic forms, but is most constant in the latter. It is not entirely continuous, but when absent, an explanation can usually be afforded. To appreciate this symptom it requires rich experience and constant practice, when one is unaided by instruments of precision, the sphygmometer and the sphygmograph. Some years ago, when reading "The Handbook for a Physiological Laboratory," by Burdon-Sanderson, vol. I, Philadelphia, 1873, pp. 218, I was much impressed with this statement: "the arterial pressure, although in the mean remarkably constant, almost as constant as the temperature of the body, is subject to recurring variations—*i. e.* alternating augmentations and diminutions, which are of three orders." Until within the last year I was disposed to regard the statement, as to the constant condition of arterial tension within slight variations, as an assertion which experience did not entirely support, notwithstanding the high character of the author. My observations made within the last year go to confirm all that Burdon-Sanderson has said. I shall refer particularly to what convinced me as I pass on in the subject.

For the appreciation of changes of tension, very considerable experience is necessary. I shall consider arterial tension in the following manner: First, the determination of arterial tension by palpation and other signs. In increased arterial tension the arterial system is overfilled with blood, and this is a constant symptom with certain exceptions, in all forms of Bright's disease, whether the Bright's disease occur primarily or whether it occur as secondary disease; for example, secondary to phthisis.

The following are the clinical evidences of this condition: In extreme cases the temporal and radial arteries are tortuous, and being full of blood they leap from their beds apparently at each pulsation, producing a pulsation somewhat resembling that of aortic regurgitation, only that the artery in the interval does not disappear. The radial artery in marked cases feels very much like the tendon of the flexor carpi radialis adjoining it, or like the vas deferens.

One must appreciate besides the arterial tension, the existence of endarteritis deformans, if present. The pulsation in the atheromatous vessel is not so definite to the touch as in arteries of high tension. The pulsation is, however, usually distinctly visible; even when there is no aortic regurgitation, although the pulse resembles it. The pulsation in simple high tension without extreme arterial tension is visible, but not to such a degree as when associated with arterial disease. The pulse is also easily compressed in cases of arterial disease. In a small contracted artery high tension is not so easily appreciated. Then one must make pressure over the artery against the styloid process of the radius, and appreciate the degree of pressure required to stop the circulation. It is well, also, to compare the degree of pressure required to compress the radial artery with the amount necessary to compress the temporal arteries, although to do this requires much greater delicacy of touch. The artery in health ought not to be appreciable to touch in the interval of pulsation, and if it is, it is due to the fact that the artery is full of blood, or that there is present a thickening of the coats of the vessels.

Qualities of the Pulse.—The pulse is long, by reason of the prolonged systole, and it gives the finger resting on the pulse a labored, pushing sensation. The pulse is persistent, because always full, and is recognizable in diastole as well as in systole.

The Pulse is Hard.—The more blood forced into the arteries by the strong, hypertrophied heart, the harder is the pulse. When the pulse has not this hard quality under this condition, it

is a sign usually of failing heart, and instead of the hard feeling being appreciated, only a great degree of incompressibility remains, and to the superficial touch the pulsation may seem feeble. Before considering some pulses which appear, by reason of the changes in the heart, in the aorta, or in the lungs, I wish to call attention to certain other signs of high arterial tension.

A beat or pulsation "is perceived over an enlarged, ascending aorta, to the right of the upper portion of the sternum, and mainly in the second space, in a few rare cases of acute Bright's disease on the one hand, and of granular kidney, in its advanced stage, on the other" (Sibson).

Next, marked accentuation of the second aortic sound, often of a metallic quality, is frequently heard. If the second sound over the aorta in the second right space be compared with the second sound over the pulmonary artery in the second left space, in each about one inch from the sternum, the sound is much less loud and more flat over the pulmonary artery, wanting in metallic note, unless the metallic character of the aortic second sound drowns the natural character of the pulmonary second sound, and is heard over both places, though much louder over the right.

"A remarkable sign occurs in the majority of cases of acute Bright's disease, in the form of doubling of the second sound over the region of the cornus arteriosis, and less visibly over that of the pulmonary artery, and less still over that of the ascending aorta." "This second sound," says Sibson, "is the more metallic of the two second sounds."

"In all cases of chronic and established Bright's disease, but not acute Bright's, we may, and often do, have a double second sound over the arteries, especially the cornus arteriosis, and a double first sound over the septum of the ventricles. In one or two cases there was a restricted meeting point over the upper part of the septum, close to the cornus arteriosis, at which the two signs meet each other at the borders of their respective areas, and then we had both a double first and a double second sound heard simultaneously."

The Bruit de Gallop.—The Bruit de Gallop, which is frequently overlooked, and is often not deciphered, and is considered simply as a case of irregular heart's action, has been described by Bouillaud and Potain, and is described also in the August number of the *Archives of Medicine*, 1881, by Dr. Frederick P. Henry.

Hypertrophy of the heart, and especially hypertrophy of the left ventricle, is one of the most valuable signs of chronic Bright's disease, although it occurs in a considerable number of acute and subacute forms of nephritis. "Another circumstance, one which must not pass unheeded, is that the degree of hypertrophy of the heart, and, therefore, its compensating power or capacity, will vary in different cases, in accordance with the general state of the patient's nutrition and the external conditions to which he is subject, and that, as a matter of course, the same factor will materially influence the course and issue of individual cases of the disease" (Bartels).

The signs by which hypertrophy of the heart i recognized are the intensification and doubling of the sounds already referred to, the displacement of the apex, and an increase in the superficial and deep areas of dullness. Galabin gives "on the connection of Bright's disease with the changes in the vascular system," 1873, thesis, in granular kidney, 53 cases of hypertrophy out of 79 cases, 24 of which were in women. If it be asked, why is hypertrophy not more common, the answer will be: First, the hypertrophy, or its compensatory power, will vary in different cases in accordance with the general state of the patient's nutrition and the external conditions to which he is subject, and that as a matter of course the same factor will materially influence the course and issue of individual cases of the disease. Second, Moxon, in the *Lancet*, Jan. 12th, 1878, p. 43, states, "the heart's increased power is exerted in the vessels instead of being diffused on hydrostatic principles over the enlarged interior, as is the case when the cavity is widened, but the heart may reach twenty ounces in weight, and yet if its cavity is not enlarged it may give no sign at all, as we have proved on several occasions, in cases where, knowing the presence of granular kidney in persons with apoplexy, we have examined for evidences of cardiac hypertrophy and found none at all, whereas, post mortem directly after showed hearts weighing from seventeen to twenty ounces."

Bartels is of Dr. Johnson's opinion, that "in states of general malnutrition, which include a watery condition of the blood, or a general diminution of its mass, neither can any hypertrophy of the heart take place, nor need dilatation of its cavities take place." In this way is to be explained absence of hypertrophy in many cases of disease with chronic Bright's disease. Bamberger states that clincially the secondary forms of Bright's disease are characterized by the frequency with which the renal symptoms are overshadowed and obscured by those of the original disease, by a rarity of cardiac hypertrophy; 3.3 per cent. occur in the secondary forms of Bright's disease, as against 42.6 per cent. in the primary form, excluding cases with concomitant valvular disease, endocarditis, aneurism or emphysema. Bamberger, moreover, states that "hypertrophy of the heart occurs in every period of the disease, but with greater absolute as well as relative frequency, the longer the disease lasts." So that in accounting for the absence of hypertrophy the element of time must be considered.

Dr. J. Milner Fothergill, *Lancet*, Jan. 9th, 1875, also states that in some patients, especially in women, the heart in high tension, instead of hypertrophying, dilates, the amount of urine diminishes, and the hard, incompressible pulse disappears, and palpitation supervenes.

In addition to this may be added the difficulty in determining hypertrophy unaccompanied by dilatation; also when hypertrophy and dilatation are associated with emphysema and ossified cartilage.

The Sphygmometer.—This instrument was invented by Handfield Jones, and is intended to measure the arterial tension. I have made much use of it for three or four years, and have not been able to obtain any positive results.

The Sphygmograph.—After some four or five years' daily experience in the use of the sphyg-

mograph, I am prepared to say that I regard it as one of the most valuable instruments in our possession. But also as one which requires a most intelligent use, and a very considerable experience, in order to profit by its showings. Moreover, one must bear in mind, that by itself, as is the case with so many instruments of diagnosis, sources of error are considerable. It must be regarded as contributing much, and as an adjunct. But very seldom can we rely alone upon the sphygmograms or tracings, to make positive statements. Rarely, also, do we obtain tracings which are pathognomonic. Indeed, often the condition of arterial tension cannot be entirely settled by the sphygmograms, and yet we could not dispense with it in such cases, as it is of a certain degree of assistance.

The sphygmograph is of considerable importance in appreciating conditions of blood tension, and the one without a spring (Blondel's), and where a dead weight is applied, gives the most correct interpretation of the curve of the artery. The appreciation of the amount of pressure used is absolutely necessary for the estimation of the degree of arterial tension, and one ought not to depend upon the sphygmograph alone in arriving at a conclusion as to the presence or absence of degree of tension, but he may rely to a greater degree upon an instrument like Blondel's, in appreciating high tension. The only errors in the tracings which can occur with this instrument, are the depth of the artery and its being situated too much to the ulnar side, under the tendon of the flexor carpi radialis.

Dr. McBride then described the pulse trace, as made by the Marey, Mahomed. Pond, Dudgeon, and Brondel sphygmographs, and mentioned certain anomalies of the sphygmogram in the course of chronic Bright's disease.

While, however, asserting that high arterial tension is one of the most constant symptoms of Bright's disease, one must not expect to find it always. It is absent in the following conditions, and one should bear them constantly in mind:—

(*a*) In pyrexia, a temperature of 102° is accompanied, as a rule, with full dicrotism.

(*b*) Loss of blood, as in epistaxis.

(*c*) Contraction or obliteration of pulmonary vessels, as occurs in emphysema.

(*d*) In phthisis tuberculosis, especially when accompanied with high temperature.

(*e*) In certain forms of valvular disease, as mitral stenosis, mitral insufficiency and aortic regurgitation, where the heart is weak and the arteries no longer overfull.

(*f*) Paresis of vaso-motor centre from drugs, or injuries to the spinal cord.

Now we come to the consideration of another set of signs, the presence of thickening of the walls of the blood vessels, especially of arteries of the size of the radials and temporals. It is very generally admitted that changes in the small arteries throughout the body are a common feature in chronic Bright's disease. Drs. Johnson, Gull, and Sutton, of England, have especially called attention to this; Dr. Johnson maintaining that this increase in the thickness of the arterioles, is due to hypertrophy of the muscular walls of the arterioles, and Drs. Gull and Sutton that it is due to some fibroid change in the walls of the vessels, which they term arterio-capillary fibrosis. This change has appeared to be such a common symptom in the cases of chronic Bright's disease that I have seen, that I have thought it worth while to mention it as a symptom of the disease, where the diagnosis must depend upon the collocation of a number of symptoms which obtain some value in arriving at a diagnosis, in which other causes of the diseases which are here considered as a sign, can be excluded.

Endarteritis chronica is a common disease, and is especially frequent in males. It is rarely found before forty, according to Quincke (*Ziemssen*, vol. vi, pp. 340, New York), although very many cases have been observed under forty. It is common to old age, and yet it is sometimes absent in persons from eighty to one hundred years of age. Guineau de Mussy considers it just as frequent and severe before the forty-fifth year as after it. The causes assigned to its production are chronic alcoholism, lead poisoning, gout, rheumatism, syphilis and chronic disease of the kidney. It occurs also in anæmia, and in starvation. Since the more recent theories advanced in explanation of the occurrence of chronic Bright's disease, namely, the circulation and excretion of certain noxious substances, as I shall mention presently, it seems not unlikely that endarteritis chronica should be produced by a similar cause, especially when small arteries are involved. I therefore believe that when we can exclude certain other causes of endarteritis, as rheumatism and alcoholism (and one cannot exclude any more of the supposed causes of this disease, since it is said that the remaining diseases which appear as causes are as frequently causes of kidney disease), this condition of the vessels should be regarded as a symptom of some importance in making the diagnosis of a chronic nephritis in which perchance no urinary or other symptoms have thus far appeared.

I have been unable to find any allusions to the condition of the arteries of the extremities in cases of chronic Bright's disease. The frequent presence of apparent thickening of the walls of the temporal and radial arteries in these cases during life, leads me to think that if examination of these arteries was made more frequently, endarteritis would be found to be more common than is now supposed. Moreover, there is greater reason for supposing that the arteries of the extremities should undergo the changes peculiar to endarteritis than the arteries of internal organs. Excluding, then, other causes of endarteritis chronica, the presence of arteries in this condition has a certain weight in diagnosis, and I have yet to meet a case in which a careful examination and a full consideration of all of the symptoms have been made, in which Bright's disease was not found to be present in connection with the diseased arteries.

The assistance in diagnosis of chronic Bright's disease, rendered by the presence of certain diseases common to this affection.

First. Emphysema. Delafield, in Robert's Notes, considers this matter, and refers to the following diseases, and Bamberger also makes mention of them:—

1. Emphysema, which occurs in a consider-

able number of cases. At Guy's Hospital, chronic bronchitis, they say, means, as a rule, chronic Bright's disease.

2. Pneumonia. In patients with chronic Bright's disease, and when the patient is over forty, this should attract attention. Bamberger gives 162 cases in 807 cases of primary Bright's disease, or 22 per cent., in which pneumonia was present, and in which the interstitial kidney was only first recognized by post-mortem.

3. Cerebral Hemorrhage. This is another affection frequently found with Bright's disease. Wilks and Moxon assert that in 75 per cent. of the cases of chronic Bright's disease this occurs. They also state that the hemorrhage in these cases is very great, and that it occurs in persons who have been up to this time supposed to be perfectly healthy. Bamberger states that in 82 cases of 807 cases of primary Bright's disease, cerebral hemorrhage occurred, and that in 52 of these the small kidney was found.

4. Pericarditis unassociated with rheumatism, the exanthemata, pleurisy, and pneumonia, is due almost always to Bright's disease.

5. Peritonitis. When the common causes are excluded, a certain number of cases are left, deemed hitherto idiopathic, and most of which are due evidently to Bright's disease. Bamberger mentions 2.7 per cent. of cases in the 807 of primary Bright's disease.

6. Pleurisy, especially when double, is met with in Bright's disease, or tuberculosis.

7. Cirrhosis of the liver.

8. The presence of aortic regurgitation and mitral regurgitation, without a previous history of rheumatism, the exanthemata, pleuritis and pneumonia, physical strain, alcoholism and syphilis, are entitled to some consideration as evidences of the presence of previous high tension and probable Bright's disease. Dr. Janeway, in a note to me, states that aortic diseases, as a rule, are more common in those advanced in life; that in the old, also, mitral tension is comparatively rare; that the mitral murmurs are more common in the young, and to this we may add, that mitral regurgitation will be found, as a rule, more frequent in the old when all other causes have been excluded.

In the diagnosis of chronic Bright's disease, we should consider, also, the diseases in which Bright's disease is more commonly secondary, and this has a certain weight in enabling one to obtain a diagnosis.

We now come to another point in diagnosis, heredity, whether predisposing or exciting. Hereditary influence is sometimes the sole recognizable cause of the disorder. Delafield, Robert's Notes, states, "there seems to be a disposition in certain families toward the development of the disease."

The second variety of chronic Bright's disease which has been so well described by Dr. Delafield, in his published notes. In this class we meet certain cases that have presented no symptoms of kidney disease previously, but if they meet with a surgical accident, break a leg or receive a wound, or contract some disease, a tonsillitis or a pneumonia, or pleurisy, then many of the objective signs appear, and some of the symptoms of chronic Bright's disease are complained of. They may have œdema, evidences of hypertrophy of the heart, of valvular disease of the heart, which I assume as most common to chronic Bright's disease. The presence of high tension if there be not excessive fever, thickened arteries, dry and gray hair, dyspnœa, certain stomach disturbances, change in the quantity of urine, change in the specific gravity, appearance of albumen, and perhaps casts. They may pass out of this condition. The albumen disappears, specific gravity becomes normal, or more likely becomes very high; or all these signs and symptoms of chronic Bright's disease may remain. Where they do not they may attain apparent health, retaining only the objective signs of Bright's disease, excluding those of the urine. Under this class may also be included certain other cases in which the disease is ushered in by, or is first manifested by

(*a*) A convulsion, resembling in every respect an epileptic convulsion, only that the temperature is higher than in epilepsy, since the temperature in uræmic convulsions, coma, is high and not low, as stated by certain French writers.

(*b*) One may be attacked with coma as the first sign of kidney disease, and this is accompanied by high temperature.

(*c*) Or severe neuralgic pains, or a severe headache may be the first manifestation.

(*d*) Or they may be attacked with acute delirium and other head symptoms, with high temperature, and die or come out of it. In the examination of these cases for the purpose of diagnosis, we consider the age, the heredity, the previous history of the patient as to the former existence of a dropsy, general or localized; the history of gout, rheumatism, alcoholism, lead poisoning, and the presence formerly of deposits of uric acid or oxalate of lime in the urine. Then we proceed to the examination of the patient, and endeavor to discover whether any of the signs that we have pointed out are present.

Dr. McBride then gave a brief history of the five cases referred to at the beginning of his paper.

The discussion which followed was participated in by Drs. Flint, Draper, Delafield, Chase and Loomis.

The Value of Viscum Album or Mistletoe in Affections of the Heart.

In a communication to the *Practitioner* for November, 1881, Dr. R. Park, of Glasgow, states that among a clientèle consisting mostly of miners, he found an unusually large proportion of cases of heart disease. Some were displacements, some valvular disease, some hypertrophy, some asthenia and palpitation simply. Rheumatism and the cramped position in which the men worked were variously blamed for the morbid conditions. Whatever the exact pathological condition might be, incompetency and tumultuous distressing cardiac action were the immediate symptoms calling for treatment in those that presented themselves. For these he prescribed ʒ ss doses of tincture of mistletoe every four hours, with the very best results; all the patients returning with the above symptoms ameliorated. The Doctor regards the mistletoe as a valuable substitute for digitalis.

EDITORIAL DEPARTMENT.

PERISCOPE.

On the Preparation of Tinctura Ferri Chloridi.

According to a letter from Dr. E. R. Squibb, published in the Boston *Journal of Chemistry* for Sept., 1881, freshly prepared tincture of the chloride of iron is comparatively valueless. This is what he says :—

In regard to tinct. chl. iron, the last committee of revision of the U. S. P. made a mistake which is to be corrected in this revision. Tinct. chloride of iron is not fit for use until at least six months old. I never send out any that is less than six months old, and have now changed to make it a year old. An important part of its therapeutic value depends upon ethers that are generated slowly from the large excess of HCl [hydrochloric acid] and the alcohol, and any one who will compare the sensible properties of an old with a recently made tincture will see how very different they are. The present U. S. P., therefore, in permitting the acid solution of the chloride to be kept and sold separately, so that the pharmacist can make up his tincture as he wants it, makes a great mistake, and on that account I have never made nor offered the solution of the U.S.P. for sale. The solution of chloride of iron of my list is a very different thing, and is the old Pravaz solution, which has been used chiefly for surgical purposes since the time of Pravaz. The second mistake of the U. S. P. was in adopting an incor rect name for its highly acid solution, and thus confusing it with a solution in common use which is very carefully made normal, or free from the smallest excess of acid. This solution (of my list) contains fifty per cent. of normal neutral chloride of iron, and from being normal does not do to make tincture at all ; *and much alcohol has been wasted in trying to use it.* This, however, was not my fault, though perhaps, I ought to have dropped it from my list when the U. S. P. took the same name for its acid chloride. There have been many mistakes made and much harm done also on the other side of this matter, by surgeons prescribing for their uses the liq. ferri. chloridi, and of course getting the U. S. P. solution, which from its abundant free acid was very hurtful in surgical use.

The Operation of Lumbar Nephrectomy.

A case of this, for stone in the kidney, was recently performed by Mr. R. Barwell, who describes it as follows in the *British Medical Journal* :—

I made an oblique incision from the eleventh rib to the crest of the ilium, and endeavored to recognize the edge of the erector spinæ. Nothing but scar-tissue could be found ; the guide to the kidney was lost. The mouth of the sinus was dissected off, and along the track I pressed my finger, felt the stone, and passing the knife along the digit, enlarged my cut to the size of the outer wound ; but, owing to the small space between the crest of the ilium and the rib, the room obtained was quite insufficient ; the scalpel was therefore run along the border of the rib. so as to make an angular flap, which being held aside, afforded more space. Up to this time, a barely appreciable amount of blood had been lost ; but an attempt to extract the stone. which broke in the forceps. produced very considerable hemorrhage from the kidney. Dreading for so anæmic a patient any loss of blood, I pressed on the gland a piece of sponge, upon which Mr. Morgan kept up firm pressure, while I, deeming in the pressing circumstance boldness to be the best discretion, very quickly partly enucleated, partly broke down the gland sufficiently far to permit me to pass a ligature over it, and tie the vessels near their entrance. This completely checked all bleeding. and I could now more leisurely peel away the organ. I thus separated it entirely, save a small portion of its upper extremity, which I could not sunder save by incurring risks that I deemed unjustifiable. Another ligature was now thrown over the gland, and the pedicle, vein, artery, and ureter were tied *en masse* with a strong piece of carbolized silk. But the kidney was far too large to be extracted entire between the rib and the ilium ; therefore, a pair of large curved scissors were introduced, the gland was divided from without inward, and bloodlessness being verified, each half was separately cut away and removed from the wound. The great cavity remaining was then filled with carbolized sponges and bandaged. The operation and subsequent dressings were managed on antiseptic principles. During the night of the operation, the temperature was 101.8°, that is, two-tenths of a degree higher than it had been four nights previously. There was no shock. On the next morning, the urine contained a large amount of pink (blood-stained) albumen. Its quantity was thirty-two ounces ; specific gravity 1.013. Further there is little to record. Regulation of diet mitigated, and then eliminated, the albuminuria. The temperature became on the third day, and has since remained, normal. A small sinus-mouth, furnishing very slight discharge, remains. The boy is fat and strong.

Nephrectomy has been performed for stone in the kidney ten times ; the case just recorded is the third successful one.

The Value of Comparative Pathology.

On this little understood subject, Professor W. S. Greenfield, of Edinburg, says, in a recent lecture published in the *Lancet* :—

It is by the study of comparative pathology that we have come to learn how intimately the processes of disease in the lower animals may resemble those in man, and it is by experiments upon the diseases which they have in common with man, that we have come to appreciate those differences in constitution and in reaction to disease which enable us in a great measure to control the results of experiments.

Comparative pathology, that is, the study of the diseases of the several classes of animals, and the study of the same disease in its reactions upon different classes of animals, is to a very large extent a growth of late years. Just as I remarked that the growth of human morbid anatomy followed in the wake of the progress of normal anatomy, so has the study of comparative pathology followed the development of comparative anatomy, comparative physiology, and comparative embryology.

It is true that a study of diseases of animals has been to some extent conjoined with the study of comparative anatomy and physiology, and that Harvey, Hunter and Jenner were well aware of the valuable information to be derived from a comparison of human with animal pathology. It was well known that some of the lower animals were subject to certain morbid growths and parasites analogous to those which afflict man, such as warts, cancers and hydatids, and that some animal diseases, such as hydrophobia, could be communicated by inoculation to man; and long before Edward Jenner discovered that cowpox could be transferred to man, it was suspected that smallpox was primarily an animal disease.

But we have only recently come to understand the full bearing of those endemics and pestilences which have in all ages desolated the animal world, and to see that we stand on common ground with the brute creation in being subject to the same or to analogous plagues, and that by the study of these, under their simpler condition, we may hope to throw light upon the forms affecting man. It is in this branch of comparative pathology—that relating to infectious and contagious diseases—that we see best the value and importance of experimental pathology, in the direct benefits which it confers on the whole brute creation, as well as upon man, and it is in this field that have been gained some of the most remarkable triumphs of modern pathology, which bid fair to revolutionize the science and treatment of infectious disease.

On Extra-uterine Conception.

At a recent meeting of the Edinburg Obstetrical Society, Dr. Battey, of Georgia, who was present by invitation, stated that he had seen four cases of extra-uterine fœtation. In three, no operation could be performed, and in one he had operated as he would afterwards detail. In cases where the fœtus had died, their duty was to wait and let nature, as it were, lead on, aiding her when necessary. When the fœtus was living, a very grave question arose, throwing very great responsibility on the medical man in charge. There was really no fixed rule. Cases of operation there were in fair amount and with moderate success. In his own case the patient was in the sixth month of gestation. The diagnosis was very difficult; and doubt and skepticism were expressed by other medical men as to the opinion he had given on the case. The os uteri was inaccessible, the uterus high up and to the left, and the true pelvis filled with a sac. Ballottement was obscure at first, but more distinct afterwards. Fœtal movements were obscurely felt. The distress and pain felt by the patient were unusual, and latterly the obstruction to the bowels very serious. There was also difficulty in emptying the bladder, so that the catheter had to be employed. The bowel, indeed, was so loaded, that after operation a large amount of fecal matter issued, simply from the distention. The case was such as forced him to operate. In making the vaginal incision, he used Chassaignac's écraseur, first passing the curved trocar with reversible blade. He punctured the sac in front of the rectum, and shoved the cannula toward the neck of the uterus, as high as he could. He next brought out the trocar in front of the uterus, caused the chain to follow, and cut through the tissues without hemorrhage. In seizing the fœtus the opening proved too small. This displaced the placenta, and a fearful gush of blood occurred. He tamponed both sac and vagina, but the patient became pulseless. Under frequent hypodermics of whisky (140 150) she rallied, however, but died ultimately, from septicæmia, on the sixth or seventh day. The child survived one and a half hours. Dr. T. G. Thomas had operated with good success in four cases. It was evident that every case had to be treated on its own merits.

Long Retention of the Placenta.

The following case from the *Lancet* has several points of interest which will occur to the reader. It is reported by Dr. A. W. Edis:—

Mrs. T., aged thirty-nine, married nineteen years, mother of twelve children, besides having had several miscarriages. She became again pregnant in the spring of 1881. Towards the end of June, without any well marked assignable cause, she miscarried, at the time when she considered herself between the fourth and fifth months of pregnancy. A nurse who attended her thought everything had come away. All traces of hemorrhage ceased at about the end of a fortnight, but in a month from this date she had a profuse loss of blood per vaginam, and the discharge of blood continued on and off for another two months. On the evening of Oct. 6th I was requested to see the patient in consultation, as the hemorrhage had returned more violently, large clots being from time to time passed. On examination the uterus was found to be much above the normal size, the os patulous, readily admitting the finger, which detected a mass of moderately firm consistence, adherent to the fundus, smooth and somewhat lobulated on the surface, evidently, from its feel and its extensive base of attachment, placental. But little difficulty was experienced in passing two fingers within the cervix. The mass was gradually peeled away, commencing at the circumference. It was then extracted piecemeal by the aid of ovum forceps, as it was too large to pass through the os uteri. There must have been at least three ounces by weight, probably the whole of the placenta. It was not the least offensive to the smell, nor did it bear the slightest trace of decomposition. The uterus was subsequently washed out with hot water, ergot and opium administered, and a pad and binder applied.

Reviews and Book Notices.

BOOK NOTICES.

The Science and Art of Midwifery. By William Thompson Lusk, A.M., M.D., Professor of Obstetrics and the Diseases of Women and Children, in the Bellevue Hospital Medical College, etc., etc. With Numerous Illustrations. New York: D. Appleton & Company, 1, 3 and 5 Bond Street. 1882. Cloth, 8vo. pp. 687.

Notwithstanding the great number of excellent treatises on midwifery in the English language already in existence, the improvements made in the practice of the obstetric art have of late been so numerous, and the views entertained respecting the physiology and pathology of pregnancy, or what may be considered the science of midwifery, have undergone so many and rapid changes, the results of modern investigation, that a work which, like the one before us, combines the qualities of being a safe and reliable guide to the practitioner, at the same time that it presents to the reader a fair statement of the labors of recent investigators, cannot but prove useful. As the author remarks in his preface, "the art of midwifery has ceased to rest upon empirical rules, and is already, with rare exceptions, the natural outcome of scientific principles." A peculiar feature of this work is, that the author seems to have lost almost entire view of *self*, and retired behind plain statements of facts; and the doctrines taught have, he informs us, been subjected to rigorous clinical tests, while he has everywhere sought to supplement and correct his own personal experiences by the recorded observations of others. Throughout the work, therefore, we find numerous references to recent authorities, which will enable those desirous of doing so to examine for themselves the original sources of information. Under the "Pathology of Pregnancy" he deals more fully with such accidental complications, fevers and other diseases, which may occur during pregnancy than most authors. With regard to the use of anæsthetics in the management of natural labor, he thinks that in the first stage of labor they are seldom required, and if used, would be apt to do more harm than good; in the third stage they are unsafe, but in the second stage he regards them of real advantage, if used in moderation. In the choice of anæsthetics he gives his preference to chloroform, except when complete and prolonged anæsthesia is required, when he regards ether as the safer agent. The application of Lister's principles to obstetric practice he regards as a great improvement. He does not, however, advocate the conduct of labor under the carbolic spray, experience having proved that it does not add to the safety of the puerperal woman. On some few minor points we think his teachings are inadequate to the needs of the young practitioner; thus, on the treatment of after-pains, he is absolutely silent. Whether this is because he regards them as purely physiological and not to be interfered with, or because he thinks them too trifling to need treatment, we do not know. In our experience, they have at times proved more violent than real labor pains, and have resisted the effects of opium, chloral, and even chloroform, for which reason we think them of sufficient importance to demand more attention. On the whole, however, the work is one of the best with which we are acquainted, and its value is much enhanced by the large number (226) of elegant illustrations introduced.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, etc. Fifth Edition, thoroughly revised, with illustrations. Philadelphia: Henry C. Lea's Son & Co. 1881. Half Russia, 8vo. pp. 836.

The value in which this work is held by the medical profession is fully shown by the fact that is has now reached its fifth edition, which, like former editions, has been thoroughly revised and considerably enlarged, the matter added being chiefly related to treatment. Therapeutics hold a prominent place in this work, while discussion of theories has been avoided, except as they influence practice. It is divided into three parts, each part being again subdivided into sections and chapters. Part first treats of infancy and childhood (physiologically considered); the care of the mother in pregnancy; mortality of early life, its causes and prevention; weight, growth, lactation; selection of a wet nurse; course of lactation, weaning; the quantity of food required in infancy and childhood; artificial feeding: bathing, clothing, sleep and exercise; accidents and ailments incident to the birth of the infant, and detachment of the cord; ophthalmia neonati; diseases of the umbilicus; umbilical hemorrhage; diagnosis of infantile diseases; therapeutics. Part second treats of constitutional diseases, embracing diathetic diseases, such as rachitis, scrofula, tuberculosis and syphilis; eruptive fevers; non-eruptive contagious diseases; and other general diseases, as, intermittent, remittent, typhoid and cerebro-spinal fevers, rheumatism, and erysipelas. Part third treats of diseases of the various systems and apparatus, as the cerebro-spinal system; the respiratory system; the digestive apparatus; the circulatory system; and the skin. The author's style is pleasant and easy, and his description of diseases and their symptoms clear, while his prognosis and treatment are based on a large personal experience as well as extensive reading.

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MODERN AND ANCIENT SPECIALISM.

The natural tendency of the increase of knowledge is toward the subdivision of studies. Books multiply, teachers increa e, facts accumulate, until it becomes impossible for any one head to retain the whole of what is to be learned in any one domain of science. Time was when Pliny wrote a *Historia Naturalis*, which embraced all that was accessible in the realm of physical nature. An ambitious attempt of the same kind was left unfinished by Alexander von Humboldt. None but a vain idiot would make a third effort of the kind.

The rise of specialism is owing directly to the increase of knowledge, and is a proper and necessary result of it. Surgery and medicine have always been regarded as separate fields ever since either could lay claim to being a definite avocation. Both, moreover, have, from very early times, been subdivided into what we now call specialties; but the subdivision was made on very different principles. In ancient Egypt the practice of medicine was confined to a priestly class, who were expected to render their services in most cases without compensation. The members of this caste followed a particular branch by law, and through hereditary custom. The son of an oculist was trained as an oculist, of a bone-setter as a bone-setter, and so on. They were prohibited from practicing outside of their particular branch.

Under the empire in Rome specialism flourished extensively, but it was not regulated by law, and was mere hobbyism, or quackery. Practitioners sought celebrity in the treatment of special forms of disease by the open use of those scandalous tricks which unblushing charlatans have always used to impose upon the multitude. Hence, the severity with which the ancient writers of real merit refer to these quacks; hence, the bitter words which the great satirists of the decadence, Martial and Juvenal, use in describing these ignoble barnacles of the profession of medicine.

There is no necessary occasion in our day for any such language about specialism or specialists. They are now a legitimate and necessary result of the extension of knowledge. Any honest and unprejudiced man will see that it is simply impossible for a surgeon to keep himself fully acquainted with all the departments of general surgery. Take the monographs, journals and volumes which appear on the subject of diseases of the eye alone: what general surgeon can find time to read them? Add to this, that to keep the hand and eye in perfect training for diagnosing and operating in this delicate specialty requires hours of daily application, and who can aspire to be really accomplished in this branch and equally so in the dozen other branches of surgery, all of which demand nearly as much reading and steady application for their perfect knowledge and performance?

What is true in surgery is just as true in medicine proper. Obstetrics and gynecology form one or two specialties. Who can pretend to keep pace with their enormous literature, with the vast number of mechanical and remedial appliances, with the constant differentia-

tions of symptoms, and at the same time be as proficient in the subtleties of auscultation and percussion, in the refined distinctions of insanity, in the extremely difficult branch of neuro-pathology, in the varied forms of diseases peculiar to children, and the like? No one can be. The thing is impossible. He who pretends to be is blinded by his own conceit, and ignorant of the extent of the learning which he claims to possess. The men of most deserved distinction in the profession frankly acknowledge their ignorance. We recollect seeing the eminent Nélaton decline to endeavor to restore an inverted uterus for the reason, as he frankly told his audience, that he had not sufficient knowledge of the strength of the uterine tissues, and would not trust himself to exercise the amount of pressure which the operation might require.

In contrast to this example is the deliberate vilification of specialists, which a class of contemporary writers love to indulge in. Thus, in a recent address, Dr. J. Russell Reynolds, of London, the editor of a large work on practice, chiefly made up by contributions from specialists, thus speaks of them:—

"If you ask me what I mean by specialism, I should say: It is a morbid condition of the mind—of physician or surgeon, as the case may be—which shows itself in his regarding every patient who comes under his care as a sufferer from the particular disease which he has studied; of seeing the symptoms only from the point of view which he has assumed, and made quite clear—to himself—and of treating it in a manner which no one like himself understands; and of treating it to the utmost degree of attention, frequency, and speciality of treatment that his patient's patience will endure."

Now, unless Dr. Reynolds chooses to give point to his remarks by the use of words in designedly unusual, narrow, and ambiguous senses, the above is a libel on his colleagues, and conveys to readers, other than medical, a false and degrading notion of a large body of earnest workers in the profession. We have had too much of this sort of talk in the last year or two. But any amount of it will not and cannot hinder or delay the operation of the great evolutionary law of specialization, which is steadily operating in medicine, as it is in every other department of human knowledge and pursuit.

Notes and Comments.

The Reporter for 1882.

As the year is drawing rapidly to a close we take this opportunity to express the hope that the readers of the Reporter during 1881 have been so well satisfied with its contents that they will not only stand by it during the coming year, but bring it to the attention of their friends, and commend it to their consideration.

Arrangements have been made to add variety and increased merit to its pages during the coming year. The tiresome padding which swells some journals will scrupulously be avoided. Original articles from able writers will be numerous. Especial attention will be paid to hospital reports and clinical lectures, and in every respect the endeavor will be to make the Reporter equal to any medical journal published.

Subscribers will especially oblige us by an early remittance for the continuance of their subscriptions.

A Case of Pneumonia Caused by a Tooth in the Bronchus for Five Days; Recovery.

Dr. T. R. Chambers, of East Orange, N. J., relates in the *Medical Record*, Nov., 19th, 1881, the case of a lady, aged thirty-five, who on August the 19th, had thirteen teeth extracted from the upper jaw at one sitting. Upon discontinuing the administration of gas (nitrous oxide) she fainted. Then she was seized with severe epigastric pain, urgent dyspnœa, cough, nausea, and prostration. It was several hours before she could be removed to her home in Orange.

On the fourth day the dyspnœa, nausea and cough, continued, and in addition there was severe pain in the left axillary line on a level with the nipples, at which place there was a zone of bronchial breathing and voice, and dullness over a space not larger than a silver dollar. In the neighborhood were mucous râles. This consolidation was preceded for two days by pulmonary congestion. Sputa scanty, serous, and mucopurulent, streaked with blood. Temperature, 102° F.; respiration, 40; pulse, 102.

The next day the temperature was 104° F.; respiration, 38; pulse 110.

On the sixth day (Aug. 24) at 9 A.M., there was severe coughing with urgent dyspnœa (the patient says "she thought she would be suffocated"), terminating with a spasm and vomiting, after which relief was obtained. In the matter coughed up and vomited was found a second molar tooth. It was positively certain that it

did not come from either jaw at this time, as both had been carefully examined since the illness begun. Blood was abundant in the sputa, which was muco-purulent in character. Cough very much easier. The whole lower lobe gave bronchial breathing and voice, with dullness. Temperature 104° F.; respiration 44; pulse 124 (two hours after the coughing struggle).

On the seventh day the patient was generally easier. Sputa copious and blood streaked. Temperature 100.5° F.; respiration 32, pulse 100.

On the tenth day prostration was marked. Copious sweats. Blood disappeared from sputa.

September 19th (one month). Patient up and about. Vesicular respiration returned to lung. Râles abundant.

September 25th. Patient well, except weak.

This case should serve as a warning to those extracting teeth to be careful to remove entirely from the mouth any tooth or part of a tooth loosened from its bed in the jaw.

On the Treatment of Poisoning by Aconite.

As a contribution to the study of the toxicology of cardiac depressants, Dr. Edward T. Reichert publishes in the *Medical Times*, Nov. 19, 1881, a summary of forty-one cases of aconite-poisoning, thirteen of whom recovered. The general plan of treatment pursued in a vast majority of cases was the evacuation of the stomach, the administration of stimulants in liberal amounts, and the application of external stimuli.

Opium or its preparations were used in four cases, all of which terminated favorably. In one case the quantity administered is not stated; in one, half grain doses of morphine sulphate were given; in another, three hypodermic injections of fifteen minims each were practiced in a short time; in the fourth case, five and a half drachms of laudanum were administered in four hours, without inducing any symptoms of narcotism.

Digitalis was administered, in connection with other stimulants, in two cases. One died; the one which recovered, and which had taken an ounce of Fleming's tincture, was given three hypodermic injections of twenty minims each within an hour.

Amyl nitrite was used in one case with immediate relief to the spasms, the pulse became stronger, and the deathly pallor of the face disappeared. This substance, as I have already pointed out, is a powerful cardiac stimulant, and promises such good results in this form of poisoning as to deserve a fair and extended trial.

Tincture of nux vomica was used in one case in three-drop doses every twenty minutes, and, as the practitioner stated, with marked benefit to the heart and respiration. Strychnine has also been employed.

The Value of Mercury in the Treatment of Membranous Dysmenorrhœa.

Dr. Robert Ormsby, of New York, reports in the *Medical Record*, November 26th, 1881, five cases of membranous dysmenorrhœa successfully treated with small doses of calomel and opium. Although his discovery of the value of this treatment was quite accidental, he now thinks it strange that mercury has not been recommended before, considering its efficacy in all forms of chronic hyperplasia. His plan is to give from one-half to a grain of calomel with half a grain of extract of opium in pill, twice or thrice daily, beginning about three days before the expected period. In every case the flow came on without pain, and no shreds or traces of membrane were found. In only one case was the treatment repeated the second month, and in all the cure has been permanent. He prefers calomel to any other form of mercury, as it produces its effects rapidly and with but little irritation.

Non-Venereal Syphilis.

Dr. John Dixwell reports, in the Boston *Medical and Surgical Journal*, a case showing the possibility of a perfectly healthy individual becoming infected with constitutional syphilis from using the same drinking glass with a person having constitutional syphilis, even in its later forms.

B., a young American, enlists in the navy at Charlestown, Mass., and is assigned for duty as a servant to one C., whose nose is depressed and whose throat and shin-bone are plainly diseased, —syphilis. After serving a short time, some four weeks or six, B. notices "his own mouth to be sore, with a punched-out, yellowish-looking spot on his lip, followed shortly by other sores on other parts of his mouth and tongue," as he describes it. On application to the surgeon he is told that he has a canker spot, and it is burned with lunar caustic; later the truth is told him, and mercury ordered, and in June last he was discharged, having well marked mucous patches and enlarged glands of whole neck, nasal and laryngeal catarrh.

At the Boston Dispensary, on August 22d, he was seen by Dr. D. and others, and he then presented all of the above-named constitutional signs of syphilis. No marks of former disease, no trace of history of other cause could be ob-

tained other than that B. drank from the same tumbler at the ice-pitcher as did C. often. No pipe was ever used by either, cigarettes alone. The boy was healthy, twenty years old, when he passed the examination, and was enlisted in the service six or eight weeks prior to his presenting the first-seen sore mouth. Since discharge he has been married, and his wife now has some throat trouble and enlarged glands of the neck. (No examination has been obtained of her as yet, however.)

Special Reports.

NO. XXI.—DISEASES OF THE KIDNEYS.

(*Continued from p.* 641.)

BRIGHT'S DISEASE CAUSED BY IODIDE OF POTASH.

In the *American Journal of Medical Sciences*, for July, 1881, Professor I. Edmondson Atkinson, of the University of Maryland, calls attention to the large proportion of cases treated for advanced syphilis that present, after death, evidences of marked kidney disease; and, in this connection, to the fact that syphilitic renal disorder in its characteristic lesion, the gumma, is comparatively rare, while the forms the most frequently encountered are not in themselves syphilitic. In searching for a cause that might produce these changes quite independently of the syphilitic poison, Dr. Atkinson concludes that since iodide of potassium has decided diuretic action, and, as is known to clinical observers, may cause both albumen and casts to appear in the urine, the continuance of this remedy in some cases might lead to the changes observed. He therefore made a series of observations upon seventy cases of late syphilis, of which nineteen presented evidences of renal alterations more or less grave. The relation existing between the administration of iodide in these cases and the appearance of mucous or hyaline casts and albuminuria was quite evident, as in a number the abnormal elements gradually disappeared after the cessation of the remedy.

The condition appeared to be catarrhal in character, and the casts were the results of renal irritation. In no case, however, was extensive parenchymatous inflammation of the kidneys excited; but an obvious syphilitic disorder of the kidney in one case disappeared under the full and systematic use of the iodide. The author's conclusion is, that while the evil effects of the iodide of potassium are small and for the most part transitory, the occurrence of more severe alterations is not impossible—nay, is probable. To these evil effects some individuals are more susceptible than others.

MANAGEMENT OF FLOATING KIDNEY.

This may be either by *fixation*, or by *extirpation*. We have recent advocates of both plans.

Extirpation.—At the last Congress of German Surgeons, Prof. von Langenbeck showed two individuals in whom he had removed the right kidney. One was a woman, belonging to the laboring class, who had suffered from severe pain, and whose mind had consequently become affected. The other was an apothecary, who had incontinence of the pylorus, which had gradually become developed through the pressure of the kidney and the duodenum. In both cases an incision was made through the abdominal wall, along the outer edge of the rectus muscle, and the outer layer of the mesocolon was divided; the inner layer being left intact, on account of the danger of wounding branches of the mesenteric artery. The secretion of urine was diminished in both cases for a few days after the operation, but afterwards became normal; a little albumen was present, but entirely disappeared. Both patients were relieved of their sufferings.

Fixation.—On the other hand, Dr. E. Halm, in the *Centralbl. f. Chir.*, for 23d July, 1881, describes his method of treating kidney by "nephroraphy," which he maintains is preferable to extirpation, as being an easier operation and more favorable as regards the subsequent health of the patient. At all events, he believes extirpation should not be performed till the more conservative method has been tried. He has performed his operation on two patients who had suffered excessively for two years, having been confined to bed for weeks and months with extreme pain. In neither case could the idea of extirpation be entertained, as in "one case there was strong suspicion that in one kidney, and possibly not in the floating one, there was a calculus, while in the other, both kidneys were floating."

The operation consists in exposing (but not opening) the capsule of the kidney by a vertical incision in the loin, dragging it still enveloped in its capsule into the wound, and stitching it to the muscles and fascia, with six or eight catgut sutures. Under antiseptic dressings, Dr. Halm's cases healed well in four weeks, and at the end of that time the kidney was found held firmly in place, and the patient perfectly relieved.

After four weeks' active life, however, the kidney was found to have again become slightly movable, so that Dr. Halm would recommend more secure fixation by opening the capsule, and

stitching it as well as the kidney to the more superficial tissues, in order to ensure that, during the erect posture, the weight of the kidney should not displace it again.

ON DIABETIC COMA.

A series of recent studies of the etiology of this condition is given in the London *Medical Record* for August last. We may say in brief that late observers have maintained that the coma arises either from blood poisoning by acetone or else from fat emboli in the capillaries. Prof. QUINCKE, of Kiel, performed twenty experiments on animals in order to determine the physiological effects of acetic ether. The animals died with marked dyspnœa: in only one instance did the urine give any reaction with ferric chloride, and the breath never smelt of acetic ether; glycosuria was sometimes present. Apparently, therefore, the acetic ether was rapidly destroyed in the body. Quincke concludes by stating his belief that the substance in the urine of diabetics which gives the red coloration with ferric chloride is not acetic ether, but a nearly allied body, and that there is ground for believing that the dyspnœa of diabetics is not always identical in its character or always produced by one and the same substance, but like uræmia, it is probably produced by the combined toxic action of many substances formed by abnormal metamorphosis.

On the other hand, the milkiness in the blood of some diabetics has been attributed by Prof. SAUNDERS and Mr. HAMILTON to fatty particles, and these are said to cause emboli. Recent experiments by Dr. DRESCHFELD, however, prove that: 1. all cases of diabetic coma have not milky blood; 2. all cases of milky blood are not fatty blood, as assumed by Saunders and Hamilton; 3. even when fat is present in the blood, fat emboli may be absent or very scarce; no proof has been offered of such extensive capillary emboli as would account for the alarming symptoms under discussion, especially those of nervous origin. It is, therefore, not too much to say that the theory of Saunders and Hamilton has so far received very little support. In fact, we may say the question still remains unanswered.

FROTHING AS A SIGN OF ALBUMEN IN URINE.

Ever since Hippocrates, unusual frothiness has been regarded as a pathological property of urine. The point has been lately examined by Dr. KIRK, in the Glasgow *Medical Journal*. He observes:—

I would say something on the bubble as a test for albumen in urine. It is only in this aspect, I believe, that the albumen bubble in urine has ever been mentioned, and it is generally said that it cannot be relied on as a test, as it may be present in non-albuminous urines. This is quite true; and not only so, but from the foregoing observations it is evident that its absence is no proof of the absence of albumen. Nevertheless, in many cases it is of considerable value as raising a suspicion, to be verified or not by other evidence; and I think it is frequently quite conclusive of itself. Any books I have read on the subject only refer to the froth which may form spontaneously on the surface. But this is not sufficient. Let some air be blown in, and the appearance of the bubble is much more characteristic. In a pale urine, if the albumen be of the frothy sort, there is little difficulty in deciding the question; at all events, I have met with no clear urine giving any similar phenomenon. This might frequently prove useful to the practitioner in country districts. With a small piece of india-rubber tubing, to which a glass mouth-piece may be added as required, or even with the stem of a tobacco pipe, he may generally make pretty certain of the presence of albumen.

RELATION OF SYPHILIS TO KIDNEY DISEASE.

We can do little more than name a contribution of great merit to this inquiry. It is by Prof. E. WAGNER, of Leipzig, in the *Deutsches Archiv für Klin. Med.* Bd. 28. The author gives the results of nine thousand post-mortem examinations, besides a much larger number who recovered. Of the nine thousand, eight showed acute Bright's disease; four, chronic Bright's disease; seven, granular kidney; six, atrophy of the kidney; thirty-five, amyloid degeneration, and three, syphiloma of the kidney.

Reviewing his statistics, it does not appear to us that any direct causal connection between syphilis and kidney diseases has been shown.

FORMATION OF THE HYALINE TUBE CASTS.

Dr. HUGO RIBBERT (*Centratbl. für die Med. Wiss.*, No 17, 1881), is of the opinion that hyaline tube casts are simply due to the coagulation of albumen in the tubules, effected by the acidity of the secretion of the renal epithelium. Egg-albumen, treated with dilute acetic acid and coagulated by heat, appears hyaline under the microscope. Having caused albuminuria in rabbits by temporarily clamping the renal arteries, he injected 20 to 30 grams of a 2½ per cent. solution of acetic acid into the jugular veins, and shortly afterwards extirpated the kidneys and coagulated the albumen in them by plunging them into boiling water (Possier). In two cases he succeeded in finding some of the Malpighian capsules filled with hyaline masses, which dissolved in water and became granular on the addition of alcohol. But in other experiments, having extirpated the kidneys from rabbits similarly made albuminuric, he found that if left in

warm water at about 60° C. (140 Fahr.), in half an hour he obtained no coagulation, or only the familiar granular one; but if he employed fresh urine instead of water, the albumen coagulated in hyaline masses, not soluble in water and not changed by alcohol or by boiling in water.

FILARIA IN THE URINE.

A case of this was recently shown to the Pathological Society, of London, in the person of a young Indian officer. On this occasion the eminent helminthologist, Dr. COBBOLD, stated that the filarial discoveries had not received their due attention in Europe, and were not even alluded to in the recent meeting of the Congress; but that we really are in possession of a large mass of most important facts and valuable conclusions drawn therefrom. There have been five epochs of discovery. The first was that of urinary filariæ in 1866. Then in 1872 Lewis found these parasites in chylurious patients, and others found them in various tissues of the body. The next epoch was Bancroft's discovery, in Australia, of the sexually mature worm, three and a half inches long, in a lymphatic abscess in the arm; six months after it was found by Lewis in India, and Manson in China, and in Brazil. The fourth epoch was Mason's discovery of the intermediary host, the mosquito. The fifth and last epoch is the discovery of filarial periodicity by Manson. It is most extraordinary that the filariæ should be in the blood just when the female mosquito visits its human victim. If a drop of blood be taken from a man, and from a mosquito which has fed on the man, there are fewer found in the man than in the mosquito, because the proboscis of the mosquito is forced into the axis of a capillary, and catches the filariæ wholesale, and extricates them in masses from the human blood. These discoveries are even more important than those of trichinosis. It had been said that lymph scrotum, chyluria, etc., cannot be produced by these filariæ; but the evidence on this point is now so strong that it has been proposed to call this group of diseases "Wucherer's helminthiasis."

INTERSTITIAL NEPHRITIS.

Dr. H. SENATOR, in a recent memoir (*Beiträge zur Pathologie der Nieren und des Harns, Archiv. für Anat. und Phys.*, vol. XLIII), seems to admit the English theory as to kidney diseases.

He admits that interstitial nephritis may exist as a primary malady, although acknowledging that mixed forms and those in way of transition are much more frequent than the English pathologists are willing to admit.

The principal symptom is the abundance of the urinary secretion, which contains but little albumen; it appears certain even that albumen may be absolutely wanting for periods of time. The quantity of urea is not diminished as it is at the period of debut of parenchymatous nephritis.

The cardiac hypertrophy in this malady is universally known and has given rise to numerous discussions. SENATOR admits two forms: concentric and eccentric hypertrophy.

Dilatation of the heart is the appanage of parenchymatous nephritis; simple hypertrophy that of sclerosis of the kidney.

The diagnosis of concentric hypertrophy is extremely difficult. TRAUBE has indicated the following signs: 1. A sensation of abnormal resistance at the apex, which is not displaced: 2. Exaggeration (reinforcement), elevation and metallic timbre of the diastolic sound; 3. Sensation of abnormal resistance in the radial arteries. But these signs are uncertain, as TRAUBE himself was obliged to recognize when he felt himself obliged to diagnose hypertrophy in a case where there was nothing abnormal on auscultation or percussion.

The increase of the first sound, indicated by JOHNSON, POTAIN and other observers, does not seem to be much more valuable.

The vascular alterations had already been signalized by BRIGHT, and that such frequently exist is incontestable. The second part of this memoir is devoted to the study of the relations existing between cardiac hypertrophy and diseases of the kidneys.

KIDNEY DISEASE IN PREGNANCY.

A case of affection of the kidneys during pregnancy is reported by Dr. A. HILLER in the *Zeitschrift für Prak. Med*, No. II, 1881; he discusses the cause, finding it to be the pressure of the gravid uterus on the ureter. He recommends, where the symptoms are severe, that artificial labor be brought on.

Dr. A. H. SHINN (*Phil. Med. Times*, p. 747, Aug., 1881), recommends *benzoate of calcium* as an efficient aid in controlling the albuminuria of pregnancy, as well as a valuable remedy in Bright's disease from other sources. Dr. Shinn has produced a very beautiful crystalline salt of the calcium benzoate, consisting of exquisite translucent, colorless, acicular crystals, soluble in about the proportion of twenty grains to the fluid ounce of water; and of this, the dose he has adopted is, in marked cases, ten grains dissolved in a tablespoonful of fluid, consisting of water with enough orange syrup to flavor it, to be administered every two or three hours during the day.

THE IMPORTANCE OF NEPHRITIS IN PREGNANCY.

M. HOFMEYER contributes a very important me-

moir on this subject, (*Zeitsch. für Geburtshülfe und Gynækologie*, Bd. III, p. 259).

The author found that 137 cases of nephritis occurred among the 5000 women delivered at the Maternity of Berlin, from October 1st, 1867 to April 1st, 1878, and that 104 of these cases were complicated with eclampsia.

Of the 33 cases uncomplicated with eclampsia, 11 of the women succumbed, and 20 out of the 35 children were still born, or died soon after birth. The author concludes from these facts that, independently of the eclampsia, nephritis, during pregnancy constitutes in itself an imminent danger to the life of the mother, and also of the child. Nevertheless, such is not the opinion of ROSENSTEIN and BARTELS, who make no mention of a fatal termination, and seem rather to dread the passage of the disease from the acute to the chronic form.

In effect, during pregnancy, two forms of nephritis occur: 1st. The acute form, characterized by the usual signs of acute parenchymatous nephritis, and almost always accompanied by eclamptic convulsions. The prognosis is favorable, and the malady lasts a few days, or a few hours.

2d. A chronic form which appears during the closing months of pregnancy, by œdema of the inferior limbs, mounting often to the labia majora, which may become enormously enlarged.

At the same time serous effusions take place in the great cavities, particularly in the abdomen: derangements of vision, bronchial catarrh, and internal dyspnœa supervene.

The quantity of urine is diminished and it contains albumen, sometimes in very large proportions. Of the 137 women cited, 46 presented this form of nephritis, and 31 of these had eclamptic convulsions; 10 of these 31 died, and of the 15 who did not suffer from eclampsia, 8 died. 28 women then survived, but 15 of these presented signs of chronic nephritis when they left the hospital, and but 8 were completely cured when discharged. But 15 of the 46 arrived at term, 30 miscarried and 17 of the children were not viable.

From these facts the author concludes that in this form of nephritis but one treatment is truly efficacious; the induction of premature labor. At what moment should we intervene? At the latest possible period, in the interests of the child. We should be guided by the intensity of the morbid phenomena. The gravity of the symptoms justifies such intervention, even at a period when the child is not viable.

(*To be concluded.*)

CORRESPONDENCE.

Amyl Nitrite in Tinnitus Aurium.

ED. MED. AND SURG. REPORTER:

In your issue of the 26th of November, we have just read a communication from J. Dana Littlefield, M.D., of Somerville, Mass., who speaks of the treatment of tinnitus aurium by the inhalation of nitrite of amyl. He mentions his own case, a symptom of which was an annoying tinnitus aurium. He was "relieved" by the inhalation of a few drops, according to the usually prescribed method, but the Doctor does not say that his tinnitus ceased entirely, although we hope most sincerely that such may be the case. He says, "the noise was modified, the character of the sound became (lighter); then longer intervals of ease, finally a decided sense of inexpressible relief" and remarked that "I felt a positive change in that side of the face." He then goes on to say, "I do not find any authority for this therapeutic use of nitrite of amyl, other than this one *partially* successful case (italics our own).

We would call the Doctor's attention to remarks upon the "therapeutic uses of nitrite of amyl," by Laurence Turnbull, M.D., in his recent work on anæsthetics*, wherein he details the results of his experience in the use of this agent, which he has since almost discarded as worthless. In this connection he refers particularly to an article by Dr. Michel, of Hamburg, "On the Use of the Nitrite of Amyl in Diseases of the Ear," translated by C. J. Blake, M.D., of Boston (*Archives Ophthal. and Otol.*, New York, 1878). Michel reports twenty five cases of his own, and six more noted by Urbants-Clutsch, of Vienna. *More or less improvement* occurred in nineteen cases; among these were three in which the tinnitus disappeared entirely from one ear, and in another case was diminished. From one to five drops of the remedy were inhaled at a sitting. In all the cases *improved*, the tinnitus was increased during the period of inhalation. Dr. L. Turnbull, says "I have employed this agent in a *large* number of cases; some were benefited, but the majority were not improved, this being in part due, I think, to the impurity of the agent employed." Since the time these remarks were first published (1878), we have employed it in hundreds of cases (my father and myself), and have given the Squibb's nitrite of amyl a fair trial, as have also other aural surgeons throughout the world; and while we recognize its possible value in *ameliorating* certain forms of congestive tinnitus we have but little faith in it as employed in aural therapeutics.

Dr. Littlefield does not say in what way "my learned aural specialist in Boston," as he rather facetiously calls him, did not agree with him or his remedy; but he does say he wants "*facts, facts!*"

We have mentioned some, and could refer him to many more, but we can assure him of *one* fact,

* pp. 132-3. The Advantages and Accidents of Artificial Anæsthesia, etc., by Laurence Turnbull, M.D., Aural Professor to the Jefferson Medical College Hospital Philadelphia. Presley Blakiston, 1879.

and he must go to "aural specialists" to find it out, viz: *that nitrite of amyl will not entirely, but may partially, relieve tinnitus aurium*, which is only a symptom, and not an "affection." Unless the Doctor be entirely relieved of his tinnitus, and that very soon, we can predict its return in full force, and would earnestly recommend his seeking the advice of one of the "Hub's" several learned and skillful aural surgeons.

CHAS. S. TURNBULL, M.D.
Philadelphia, 1702 *Chestnut St.*

Two Cases of Paracentesis of the Pericardium.

ED. MED. AND SURG. REPORTER:—

As the number of instances of pericardial tapping that have been reported is not great, I desire to put on record, two cases that have come to my knowledge, through correspondence with the respective operators. No comments are necessary from me, since I have so often heretofore asserted my belief in the propriety of such procedures, and endeavored so frequently to call attention to the favorable statistics of the operation.

Dr. James D. Trask, of Astoria, New York, gives in a letter, this account of his case. The child, aged six years, had presented symptoms of acute pericarditis for several days, and suffered with paroxysms of extreme dyspnœa. When seen by him, for the first time, there was great exhaustion and but little hope of obtaining a favorable result from operative interference. As a palliative measure, however, he proposed to the parents paracentesis, which they consented to have done. The smallest aspirator needle was introduced at the point where the distention of the pericardium seemed greatest; and three to four ounces of blood-stained serum were withdrawn. The distress was at once relieved, and the child fell into a state of peaceful rest, in such contrast to its previous sufferings, that the parents were well satisfied that the operation had been performed, though the patient continued to sink and died in about twelve hours. No autopsy appears to have been made.

Dr. Trask says: "I have been surprised at the disfavor with which this operation seems to have been regarded. My experience in the case referred to would certainly lead me to perform it, when the heart's action should become plainly embarrassed by the presence of effused fluid."

In 1874, Dr. A. A. Smith, of New York city, had under his care at the Demilt Dispensary, a patient in whom he discovered pleurisy with effusion and pericarditis, with a considerable quantity of fluid in the pericardial sac. After aspirating the pleura, he inserted the needle of a hypodermic syringe into the pericardial cavity, and drew off as much serous fluid as the syringe would contain. He was about to introduce the aspirator needle, when the patient absolutely refused to submit to the operation. His condition, however, began immediately to change, and the improvement was rapid. The absorption of the pericardial effusion progressed with rapidity after the small quantity had been withdrawn with the hypodermic syringe. Dr. Smith has often noticed in connection with pleuritic effusions also, that the withdrawal of a small quantity of fluid by the hypodermic syringe, will cause a rapid absorption to take place, though previously the amount of effusion has been stationary for a long time. He proposes in proper cases of pericardial effusion, to utilize this means of inducing absorption before resorting to aspiration with a larger pump.

Philadelphia. JOHN B. ROBERTS, M.D.

NEWS AND MISCELLANY.

The Healthfulness of Washington City.

A Committee of the Medical Society of the District of Columbia, Dr. Harvey Lindsley Chairman, have presented a report on the above subject, quite interesting to the country at large. It reads:—

The committee believe and report that the statements so generally published are entirely unfounded; that Washington now, as heretofore, is unquestionably as healthy as the most favored cities in this country or Europe; and that instead of deteriorating, it has been much improved in its general sanitary condition during the last few years, as compared with its state ten or fifteen years since. There has been a gradual but decided diminution in the extent and intensity of diseases of a malarial nature, owing, no doubt, to improved drainage, better paved streets, the filling in of low lands and other improvements which are constantly being made by our present efficient government. Malarial diseases are almost wholly confined to those portions of the city immediately bordering on the Potomac river and its tributaries, the Eastern branch and Rock creek.

A large portion of the so-called malarial diseases are not, in our opinion, due to malarial influences, but to other causes, which exist to an equal or greater extent in large cities, such as sewer-gas, the use of unwholesome food, overcrowding and bad ventilation among the poorer classes. The form of malarial diseases most commonly met with is simple intermittent fever, which is the least serious and most curable form. Death from well defined uncomplicated malarial diseases is a rare event in our city. A careful comparison of the death rate of Washington with that of other principal cities of the United States shows conclusively that it does not exceed the average, notwithstanding the very large proportion of colored people, one-third of the whole, whose death rate is generally almost or quite double that of the whites. The proportion of the colored race is greater in Washington than in any city north or west of us, and when the proper reduction of the death-rate on this account is made, it will show a sanitary condition not surpassed anywhere. It is proper to remark here that the records of the Health Department of Washington are believed to be absolutely correct as to the number of deaths annually occurring among us.

The total number of deaths in the District of Columbia for the year ending June 30th, 1881, was 4136, of which number 2206 were white persons and 1931 colored, showing a death-rate of 18.18 per 1000 per annum for the white, 31.27

for the colored, and 22.60 for the whole population. The mean annual death rate from September 1st, 1874, to June 30th, 1881, was: white 19.27; colored 37.67; total, 25.30.

We believe, too, that the unfavorable reports so industriously circulated of the unhealthy condition of the President's house are equally unfounded. This has been the residence of all the Presidents for eighty one years, and during all that time, with the exception of Presidents Harrison and Taylor, who died after a short illness from acute diseases in no way dependent on climatic influences, the Chief Magistrates, although generally men of advanced age, have enjoyed excellent health and been able to attend to their official duties with scarcely a day's interruption, a most remarkable exemption, and proof enough of itself of the favorable sanitary condition both of the White House and the city. We may add, too, in confirmation of this view, that all the former Presidents spent the whole year here, except a very short visit to their respective homes, the practice of living for a part of the summer in the suburbs having been first adopted by Mr. Buchanan; and when the present anomolous condition of the Potomac flats opposite the city, shall have been remedied, which in their present state are at least, a menace for the future—we know of nothing likely to prevent Washington from being hereafter, as now and heretofore, one of the most healthy, as it is one of the most beautiful, cities in our country.

Reigning Diseases at Paris.

According to the quarterly report of M. Besnier for the second quarter of the present year, the general mortality has slightly exceeded that for the same period of the nine years preceding.

The affections of the respiratory organs with the exception of pulmonary phthisis, which becomes more prevalent from year to year, did not surpass the usual figure for the season.

Diphtheria continued its ravages. During the quarter there there was 212 cases in the hospitals and 553 in the rest of the city. According to the report of M. Netter, from May 1st to June 30th, there occurred in M. Bergeron's service, 52 deaths from diphtheria and 9 cures. The total number of recoveries was then 50 per cent. and somewhat more considerable among the girls.

At the hospital of "Enfants Malades" M. Béclère reports in M. Labric's service 69 cases of diphtheria; in 20 cases the throat alone was affected; in 47 cases there was croup with or without implication of the throat. Of the 20 with simple diphtheria without croup, 12 died. But 7 only of the remaining 47 recovered. Tracheotomy was done in 22 cases with 6 recoveries. The eruptive fevers seemed to follow the course formulated by M. Besnier, vide decline of smallpox in spring, and on the contrary, greater prevalence of measles, scarlatina and erysipelas.

There occurred only 296 deaths from smallpox instead of 356 during the first quarter of the year, and 642 during the second quarter of 1880. 39 cases of measles were admitted into the service of M. Labric with 21 deaths, occasioned mostly by pulmonary complications and diphtheria. In the same service were received 32 cases of scarlatina with 5 deaths from the disease itself; 2 due to intercurrent measles, and 4 to diphtheria. Typhoid fever for the second time, underwent an exacerbation, unknown in the corresponding period of other years; but the number of cases (373) was much lower than for the first quarter (740).

Judaism and Suicide.

Dr. Merselli gives the following statistics in the *Popular Science Monthly*:—

We notice that in the comparisons based on the religion of suicides, Judaism figures, in which the influence of religious bonds is complicated with that of race. This is, perhaps, the only religion bound up in the fate of a single people, whether on account of the exclusiveness of the Mosaic laws, or because no other race is so jealous of its own purity, its own customs, and especially of the faith of its fathers, as the Jewish. In every country where the *chosen* people has been spread, it has always preserved the moral Semitic character, while it has sometimes modified its physical characteristics, as when becoming fair where formerly dark-skinned; the religion of the God of Abraham is the only bond which now unites its scattered members. This strong influence of race obliges one to proceed cautiously in attributing to the Mosaic religion the little tendency of Jews toward suicide. In the most ancient history of Palestine not more than ten suicides are mentioned, and their greatest number belongs to a less pure Jewish period, when, through the Babylonish captivity and through the false prophets, they lost all trace of the ancient law. Already, among the last Jews who had to struggle against the invading Roman power, suicide had become more frequent (Josephus); but, while dispersing themselves among other nations over the face of the earth, the descendants of Abraham have always shown and still show among their moral characteristics an habitual resistance to suicide, although the same cannot be said with regard to madness.

Medical Miseries in Tunis.

The French *Gazette Hebdomadaire* contains an article which has excited intense interest in Paris, on the total breakdown of the Medical and Commissariat Departments of the army in Tunis. "Before we had crossed the frontier," writes a gentleman, "only a third of a ration of bread was issued. On the 28th of April, after an engagement and a march across one of the most difficult countries in the world, the men had been living for two days on biscuit. On the 8th of May the misery of the troops was indescribable. On the 13th there was no distribution of food at all. On the following days a third of a ration of mildewed bread. On the 18th there had been no bread for two days. On the 20th three rations of biscuit and half a ration of bread arrived. No more bread until the 22d. Thus the Commissariat utterly failed in supplying 12,000 men, only forty-five kilometers distant from the Algerian frontier! The water was bad, but there was no wine and no tea."

Another letter gives an even more deplorable account of the condition of the sick. "They are all without sheets, lying in their clothes, close together. There are two basins for eighty typhoid patients, and scarcely any medicines." At Oran those attacked with fever and ague had to lie in blankets vacated by the corpses of typhoid patients, and naturally died. But worse than this, the Minister of War peremptorily forbade the return to France of fever stricken patients who were recovering, so about the tenth or twelfth day of the disease they were distributed, on mule back, to hospitals in the widely scattered towns and villages. "Sometimes the surgeons would refuse to sign the *exeat* of these men, whom they knew to be destined to almost certain death. One protested during three days, and at length received an imperative command to let them go, which he was compelled to do. The patients arrived dying."

This statement is asserted to be capable of abundant proof. The charges of Dr. Lereboullet, himself formerly an Army Surgeon, are based on information received by him direct from the field of action. It seems that in the French service the provision of medical comforts and medicines is in the hands of the Commissariat. If these things be done in a green tree what in a dry? That the Franco-German war should not have taught the French how to manage in this pigmy business in Tunis, is strange indeed.

A New Clinical Telephone.

A foreign exchange informs us that Prof. Sabatucci has contrived a medical hydro-telephone from which he predicts great results in clinical medicine. It is constructed as follows: Two leaden cylinders (five centimeters in diameter and half a centimeter thick) are each closed with two very fine iron laminæ. To the anterior part of each is fitted a wooden mouth piece, like that of a Bell telephone, connected to a caoutchouc tube, through which one may hear at a distance. The posterior part has a very sensitive electro-magnet communicating with a microphone and battery. One tube is applied to each ear. Words or sounds produced before the microphone and heard but faintly, are rendered intense and distinct by introducing liquid into the cylinders. The less dense the liquid the better.

Two sounds may be compared, and their intensity exactly measured, by varying the quantity of the liquids and noting the effects through the tubes.

Miscalled "Health Resorts."

The gross carelessness of sanitation which often characterizes summer hotels at so-called health resorts may be productive of malignant disease, and little consideration should be shown the proprietors or landlords who neglect cleanliness and drainage. We are gratified to see, in the Providence *Journal*, Nov. 19th, a severe scoring, but a palpably just one, given to the Proctor House, Andover, New Hampshire, for its unsanitary condition last summer, which resulted in an outbreak of malignant diphtheria. Let other hotels take warning.

The Virchow Testimonial.

The German medical and scientific fraternity, are contributing toward a fund in celebration of the twenty-fifth year of Virchow's professorate, to form a means for the promotion and furtherance of scientific research, bearing especially on the study of man.

Items.

—Exclusive of the mortality from yellow fever, the average death rate of Memphis for five years previous to 1880 was 34 per 1000 annually. It was supposed that the new system of sewerage would decrease this rate materially, and doubtless it would have produced that desirable effect, had not the people been obliged to drink filthy water since its completion. In reality, however, the death rate has increased alarmingly, running up to nearly 60 per 1000 for several weeks in October.

QUERIES AND REPLIES.

Dr. J. A. R., of Iowa.—We recommend to you the *Alienist and Neurologist*, St. Louis, Mo.

Dr. A. J. K., of Pa.—If you address the manufacturing company directly, they will no doubt send you the formula of the compound.

Dr. S. G. S., of Pa.—We presume the writer of the prescription was an irregular. The general ignorance of that class is so well known as hardly to require illustration.

Dr. T. C. S., of Ind.—A communication of the kind will be received with pleasure at any time.

Theta, M.D.—We have been offered several articles on the Guiteau case, but do not care to publish anything more about it, at present. The haste of writers and journals to prejudge such matters is neither scientific nor creditable.

MARRIAGES.

FULTON—GALBRAITH.—In this city, on Thanksgiving evening, 24th ult., at the residence of the bride's parents, by Rev. Dr. W. T. Eva, assisted by Rev. Dr. W. Fulton, father of the bridegroom, Alexander Fulton, M.D., and Lizzie J., daughter of James Galbraith, Esq.

KRISE—BEETEM.—On Tuesday evening, Oct. 4th, 1881, at the Lutheran Church, by the Rev. Chas. S. Albert, assisted by the Rev. A. H. Kramer, D.D., of the Reformed Church, C. Worth Krise, M.D. and Emma F. Beetem, both of Carlisle, Pa.

McNEEL—McDONALD.—In Kilbourn City, Wis., November 16th, by Rev J. V. R. Hughes, Dr. Frank H. McNeel, of Merrill, Wis., and Emma A. McDonald, of Kilbourn City.

NEWCOMBE—MASON.—On Thursday, October 25th, 1881, at the residence of the bride's parents, by the Rev. Jonathan Daily, George Frederick Newcombe, M.D., of the City of New York, and Mary C., daughter of Edwin R. Mason, Esq., of Paterson, New Jersey.

PHILLIPS—PRESTON.—At the residence of bride's parents, North Gage, N. Y., on Wednesday, Nov. 2d, 1881, by the Rev. Henry M. Sanders, Yonkers, N. Y., R. Oliver Phillips, M.D., of Yonkers, and Miss Anna C. Preston, of the former place.

PISOR—JORDAN.—At the home of the bride, October 4th, 1881, by Rev. A. M. Reed, Mr. O. P. Pisor, M.D., of Butler Co., Pa., and Miss Maggie Jordan, of Lawrence Co., Pa.

PRICE—HAINES.—On November 6th, 1881, at the residence of the bride's parents, by the Rev. William Neilson McVickar, Ferris T. Price, M.D., and Mary P., daughter of Franklin D. Haines, of this city.

THE

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Original Department.

Lecture.

SOME PHENOMENA OF LABOR.

Delivered at the Hôpital des Cliniques,

BY M. DÉPAUL,

Professor of Obstetrics in the Faculty of Paris.

Translated for the Med. and Surg. Reporter.

Gentlemen:—The pregnant female is warned that she is about to be delivered, by the appearance of certain prodromic phenomena, such as the descent of the uterus, greater facility of respiration, infiltration of the labiæ majoræ, and a glairy discharge from the vagina, with a sensation of weight in the rectal region.

Some women, however, have none of these warning signs, and are surprised suddenly while walking, or making a visit, by the uterine contractions.

Uterine contractions should not be confounded with the pains; these latter may be, and are, often wanting.

The contractions of the uterus cause the pains, it is true, but the two terms are not synonymous, for contractions may take place without pains.

Uterine contraction exists long before labor commences, and, in fact, during the entire duration of pregnancy there are contractions of the organ; it would seem that the uterus essays, as it were, the muscular labor it will be obliged to perform at the end of pregnancy.

The contractions do not present the same character during the different periods of labor; weak and far apart at the commencement, they become later on more frequent and of greater intensity. They occur at first every three or four minutes; and often succeed each other after intervals of four minutes, with almost chronometric regularity.

During the entire period the os is dilating, you may expect a certain regularity in the uterine contractions.

I speak, of course, of the generality of cases; this rule meets with many exceptions. In order to be regular, the contractions of the womb should be entirely and completely intermittent, and be reproduced at almost regular intervals; they should have a certain duration, but not be too prolonged.

Sometimes the contractions of the uterus are permanent and tetanic, oftenest under the influence of ergot, but also occurring sometimes spontaneously without any medicament having been administered. Such eventualities are dangerous, because the contraction diminishes the uterine circulation, contracting the vessels, and thus injures the nutrition of the fœtus through disturbance of the placental respiration. It is thus that the death of the child ensues often after the administration of ergot; and I consider that death is better explained by this mechanism than by the oft repeated hypothesis that death is due to the exaggerated compression of the fœtus by the strongly contracted uterus.

We should observe, in passing, that there are certain means by which this permanent uterine contracture or tetany may be diminished. I have caused it to disappear by bleeding, when the general condition of the woman permitted it. When such is not the case, recourse may be had to prolonged baths, to emollient injections into the vagina with belladonna, and to applications over the abdomen of unguents containing belladonna.

The contractions are not all of equal intensity; if the hand is retained on the abdomen, you will feel that the uterus is not always equally hard during the pains. The women themselves perceive this very well, and will often say: "this is but a little pain, the next will be a great one." In effect, the lesser and greater pains seem frequently to alternate.

You will sometimes observe a slackening, or even a veritable suspension, in the progress of labor; the woman, fatigued by the pains which commenced early in the evening, falls asleep toward morning, and the uterus does not again become active until five, ten, or fifteen hours later. This somnolence is not of gravity when there is no other complication.

The arrest of labor is often caused by any great mental excitement. It is thirty-five years since Dubois, in this amphitheatre, proved such to be the case. A woman was in labor; the students were called to the room, and entered in haste, and with much noise; the woman, who had never before seen the students, was very much surprised, and the pains ceased immediately. The professor called the attention of the pupils to this interesting fact, and desired them to return to the lecture room. In a quarter of an hour the pains reappeared. Dubois sent for the students a second time, and their presence again arrested the uterine contractions, which did not reappear until they had again departed.

We have often repeated, without desiring it, the same experiment, and have often observed the same result.

In private practice, labor is often retarded or arrested by the presence of some person more or less obnoxious to the patient; do not hesitate to send from the room, under some pretext, the aunt or mother in-law, or any person not desired by the woman in labor.

Labor takes on a different physiognomy according to the presentation, and the position even has its influence. The nature of the pains is not the same in an occipito-posterior position, in which they are more enervating, fatiguing, and more localized in the lumbo-renal region, than in the occipito-anterior position.

A shoulder presentation has not either the same pains as a head or breech presentation.

Uterine contractions are also modified by the state of the uterine muscles; if they are inflamed, or there has been anterior metritis, if the organ has scattered in it small fibrous bodies, the contractions will be irregular and less efficacious. If the uterine myomata were pediculated instead of being contained in the substance of the organ, they would not have the same influence.

I have, however, seen a woman who had a fibroid tumor in the anterior parietes of the uterus, about as large as a nut. It became pediculated later on, but presented nothing extraordinary; during pregnancy it increased considerably in size, and then again, after labor, returned to its primitive volume.

During uterine contraction the woman suffers pain; we cannot well judge of the intensity of the pain except from the statement she makes.

Or, tolerance of pain is very variable in different patients; many women are exceedingly courageous, and the tightly drawn lips, the interruption of a phrase, will alone show that they are suffering; on the other hand, many women express their sufferings with much more vivacity and even violence.

This depends much on the impressionability of the woman, her education and her manner of life. Some seem to become almost insane, shriek as if they were undergoing some terrible operation, seize the clothes, or the hair, or the beard of the physician who attends them, and sometimes use reproaches in expressions one is astonished to hear them utter. One day I was attending a young lady of one of our best families, in labor, who was crying out loud enough to arouse the neighborhood. I tried several times to quiet her, when, finally, she yelled out an oath and desired to be left alone.

In such desperate cases we possess some means of calming the patient and attenuating the pain. Long ago, in 1842, Chailly-Honoré, then chef de clinique in the service of Dubois, published a memoir on the attenuation of the pains by chloroform. Although I am not a partisan of the systematic use of chloroform in labor, I employ it from time to time, and consider that it may render great service in cases that I have mentioned.

The character of the pains will alone often enable you to determine to what period the dilatation of the os has advanced; the pains are much stronger when dilatation commences, and the women seem to suffer much more than toward the close of labor. The first pains, those which prepare, as has been said, complete dilatation, are most severe.

If you hear a woman complaining continually, crying out, etc., you may be sure that dilatation is not complete.

Later, on the contrary, the pain seems to be rather an effort, the woman feels the desire to

expel something; the pains are more effective, and she is conscious that they accomplish something; in such cases dilatation is taking place and labor proceeds normally.

Where is the seat of the pain? Authors differ; some have placed it at the cervix, others in the body of the womb, others, again, in the nerves of the pelvic excavation. A midwife, Mme. Boivin, who had herself borne children and whose affirmation should be of value, thought that the pain was in the cervix.

Other women will tell you that it is in the lumbar region, others, in the abdomen or about the waist. It is also certainly incontestable that the presentation and position have an influence on the location of the pain.

The cervix of the uterus is modified during labor, and varies at the different periods. The first thing observed is the effacement of the cervix, which proceeds from above downward, the internal orifice disappearing first. I cannot understand how this fact can have been contested since the work of Stoltz, in 1826, and the researches of Dubois, in this service. Little by little the cervix opens from above, and its cavity becomes confounded with that of the uterus, so that there remains nothing but the external orifice of the cervix, forming a small opening. When speaking of dilatation, then, dilatation of the external orifice is understood, rather than dilatation of the entire cervix. The number of uterine contractions necessary to produce dilatation is very variable. Women are sometimes met with who have the cervix effaced and dilated as large as a silver dollar, after two or three pains; you know, also, that in women who have borne several children, a first pain effaces the cervix, and a few others very soon dilate it after a short arrest. But the ordinary duration of dilatation of the cervix in primiparæ is ten or twelve hours; it varies from one half-hour to three or four hours in pluriparæ; which will not, however, prevent your meeting with women who require twenty-five hours for complete dilatation of the os on a second labor, which was brought about in ten hours in an anterior labor.

The external orifice assumes different forms as it dilates; it is at first a small round hole with very thin borders, particularly in primiparæ; but when it has attained the diameter of a silver quarter, the borders or edges are thicker, particularly anteriorly. The orifice may be, for that matter, somewhat oval or irregular, particularly if any other part than the apex presents. Certain pathological conditions, tumors or cancers, notably hinder dilatation of the cervix.

As soon as the orifice is slightly dilated, the "bag of waters" is formed, under the influence of the uterine contractions which push down the membranes. This pouch cannot at first be felt, except during a pain; after the contraction the water therein contained returns to its primitive position. In other cases the bag of waters, from the debut, remains exterior to the os; the membranes having, perhaps, lost their elasticity; when the fœtus is dead, it would seem that they close up less completely the orifice of the cervix; the same obtains in mal-conformations of the pelvis, and in abnormal presentations.

Often it may be seen through the membranes whether the liquid is transparent; if the pouch is violet or black it contains blood or meconium mixed with the amniotic liquid, which proves that the child has been dead some time. A yellowish tinge denotes the presence of meconium, which is abnormal.

In some cases the pouch is long and narrow (poche en boudin); in other cases, on the contrary, the bag is flat and cannot be easily felt (poches plates). I should wish to say that I have never sought for the "bag of waters" without finding it. I have always distinguished the liquid between the finger tip and the fœtal parts, even if the liquid layer was but two or three millimeters in thickness; it is in such cases indispensable to touch during the uterine contraction.

It happens frequently that the bag of waters does not rupture, although dilatation may be complete; in such a case it is necessary to rupture the membranes in order not to lose time in efforts and futile contractions. There is no danger in doing this when dilatation is complete.

Whether rupture has taken place spontaneously, often suddenly, and sometimes without appreciable pains, or whether it has been provoked artificially, the liquid does not escape in totality; a small quantity remains, and is prevented from escaping by the head when it occupies the orifice. Sometimes the membranes rupture when the woman is not in labor, and the cervix has undergone no modification. These "dry births" are the source of much anxiety; but it is rare that much liquid escapes, and it suffices in general to wait for natural labor to declare itself.

And in many cases, although the woman felt no pain at the moment the waters broke, when an examination is made the cervix will be found already considerably dilated.

You will frequently be called in a great hurry,

at night, to a woman, who, although not yet in labor, has been awakened suddenly by a flow of liquid. This is due in general to the rupture of the bag of waters and the flow of the amniotic liquid, which may happen, as I have already said, before the pains of labor have come on. There are uterine contractions of which the woman is unconscious, and which sometimes suffice to provoke the rupture of the membranes, before the cervix is effaced, or the os dilated. Do not be led away in the belief that dilatation has taken place because the waters have "come away." At the debut of the dilatation of the cervix its borders are very thin and hardly to be felt; sometimes the small depression of the external orifice is distinguished with great difficulty. In such cases the os is sometimes thought to be effaced, and the forceps even has been applied under such conditions. To be well assured concerning the degree of dilatation it is necessary to define the orifice with the pulp of the finger, and even introduce the extremity of the finger between the borders of the external orifice of the os and the part of the fœtus which presents whether the membranes be, or be not ruptured.

When even the amniotic liquid escapes prematurely, labor follows its regular course; but it is necessary to determine whether the escaped liquid be in reality amniotic liquid. Women may have a liquid flow when the membranes are not at all ruptured; what is called hydrorrhœa often occurs when the contents of the uterus become detached from certain points of its cavity. If the liquid is troubled, containing small white masses, constituted by sebaceous debris from the skin of the fœtus, this suffices to prove that it was in direct contact with the child, and consequently that the liquid was contained in the amnios.

There is also from the vagina a glairy discharge, more sticky than white of egg, which adheres to the finger of the accoucheur, and hardens on the linen; these mucous discharges come from the uterine cervix, and are the product of the series of glands in the cervix which can be easily perceived with the naked eye in pregnant females, for they are notably hypertrophied in this state. This glairy liquid will be felt, and will become adherent to the finger during a vaginal examination, and there will be a spontaneous discharge if the liquid is abundant.

This liquid is not always of the same color; sometimes it is mixed with a small quantity of blood, the exhalation of which appears intimately connected with this glandular production; sometimes, then, the liquid is rose colored or even red.

Under other circumstances this liquid is yellow or of a yellowish-green tinge, which makes it resemble meconium; but the child has not passed any, or it would be contained in the amniotic liquid and would follow the finger after vaginal examination.

It is not natural for the woman to lose blood at this period of labor; no blood should be seen unless it comes from some slight tear of the cervix; in such case there is but a few insignifiant drops of blood lost.

If any flow of blood meriting attention should supervene, it would be necessary immediately to seek whence it proceeded.

It is generally due, at this stage of labor, to partial separation of the placenta, oftenest because the cord is too short. As the head descends toward the floor of the pelvis it extends the cord, which in its turn draws on the placenta, which thus becomes partly detached from its insertions.

I recall the case of a young woman whose labor appeared normal until, perhaps, about three spoonfuls of blood were suddenly discharged. I immediately sought if all was well in the uterine cavity. I auscultated and found the heart-beats of the fœtus troubled and irregular. It was evident that the child suffered; it became dangerous to wait for the natural termination of labor, which might last two or three hours. Dilatation was complete. I convinced the young patient of the necessity for action, and applied the forceps. As soon as the child was extracted, five or six enormous clots, weighing about two pounds, were expelled from the vagina. The placenta had become detached, and without my intervention the child most certainly would have succumbed. He came into the world respiring badly, but by proper care he soon breathed freely.

You should, then, whenever any bloody discharge supervenes during labor, assure yourself by auscultation concerning the state of the child, and if it is necessary, and dilatation is sufficiently advanced, hasten to intervene, when the life of the child is in danger.

The vital parts.—Lady, anxious to reach the station—"Cahn't you drive a little fahster? We'll miss the train if you don't 'urry." Cabman whips up 'is 'orse, but doesn't seem to get on much "fahster." Lady, again—Cahn't you 'urry the 'orse a bit? 'It 'im in some wital part, vy don't ye?" Cabman—"'It 'im in some wital part? Vy, mum, Hi've halready 'it 'im in all his wital parts hexcept one, and Hi'm reserving that for 'Olborn 'Ill!"—*London Fun.*

COMMUNICATIONS.

WOUNDS OF THE HEAD.

BY GEORGE HALSTED BOYLAND, A.M., M.D.,
Late Surgeon, French Army, etc.

The consideration of wounds of the head is relatively of more importance than that of wounds of other parts of the body, because the danger is ever present that the consecutive inflammation may spread to the meninges, or brain itself. We must then, as regards prognosis, be very cautious, even with the most trivial wound of the head. In every case of wound of the head, the whole region should be closely inspected and felt over, as considerable wounding of deeper parts and at some distance from the spot where the blow appears to have been inflicted, may exist. Wounds from cuts are the least dangerous of all wounds of the head; such wounds have a flap, and are oftenest complicated with bleeding. The ligature is seldom necessary, and quite difficult, as the arteries running in the skin, of a thick, leather-like tissue, cannot be isolated. To arrest hemorrhage in such cases, compression is preferable to cauterization. Compression should be exercised, and not on the wound itself, but along the course of the artery, as tamponing the wound favors the development of inflammation. The suture often serves as an excellent means of stopping bleeding, it must not go too deep though (into the galea), and should be employed while the wound is fresh; and afterwards inflammation must be guarded against by avoiding irritation of the wound and excitement generally.

Low diet and cold compresses on the wound should be ordered, and the bowels regulated.

Wounds from *sticking instruments* generally undermine the tissue, run in a slanting direction, and may cause the bleeding to be a source of anxiety to the practitioner, until he finds the source of it by incising the wound more freely, when necessary.

Erysipelas often follows wounds of this character. The foreign bodies found sometimes in these wounds are partially to blame for this, but still more, doubtless, the bruising, or crushing, upon which also the considerable pain depends. By foreign bodies are meant, for instance, points of knives, bits of stone, sand, etc. It is often very difficult to ascertain the direction and length of a wound made by sticking, or pointed instruments; therefore, it is better to confine exploration with the finger and sound to those cases in which it is reasonable to accept that the bone is injured, or that a foreign body is within. The prognosis is less favorable on account of complications, such as bruises, contusions, foreign bodies, and bleeding from deep parts; moreover, they are more serious on account of the erysipelas that follows. The *treatment* is to first remove the foreign body and then to still the bleeding. To accomplish both ends, splitting the wound canal is often the best means. This should not be delayed, and may be fearlessly employed in all cases of this type in which it is impossible to carry out the indication by milder means. It is better to do this very early in the pathological process, as the splitting may become necessary under any circumstances in a few days, on account of the intensity of the inflammation, especially in wounds from sharp pointed instruments penetrating to the galea. Another reason for employing this procedure is the severe pain, which is increased greatly by the tension of the inflamed parts.

Contusions, or *wounds by crushing* of the external soft parts of the head are sometimes linear in shape; at others with flaps; again, we have wounds with loss of substance. Linear wounds of this kind are caused principally by striking with a blunt object, or by a fall against such an object. They reach often the pericranium, and sometimes pass through it.

The well-known appearance of a contusion, with its dark blue color and swelling, is too familiar to need further comment. In contused wounds with borders, these borders show plainly the different degrees of contusion. If the working of the outward force took place with great rapidity, all the appearances of contusion may be wanting. In such cases the treatment of clean, simple wounds is indicated. When real contusion of the edges of the wound is present, an occlusive bandage should be employed, the pains and too great tendency to inflammation should be kept down by cold compresses, and the granulation stage conducted later, according to the general rules. Contused flap wounds I have known to be quite frequent. The flaps themselves present different degrees of contusion; it is the duty of the practitioner to essay their union, nevertheless, no matter how unfavorable the appearances may be at first sight, as regards healing on again. The less contused parts of the flap often heal per primam, while more severely bruised parts suppurate, and those that are considerably broken down die off. But as in the first stage after a wound has been inflicted it is impossible to judge, *a priori*, of the degree of contusion of a flap, and to determine the vitality of certain points, we should treat them all as if the probability of a

direct union existed still. By this means harm is never done, and much good is of en accomplished.

It is not advisable to push charpie or wads of other material under the flap, for the simple reason that the inflammation will only be increased by such foreign bodies. In no case ought we, however considerable the contusion of a flap may be, to remove it at once and in its entirety. Contused wounds call forth oftenest a reaction that passes the bounds of what is styled adhesive inflammation, and give rise to pus channels that must soon be opened. This is the right place for counter openings, which are best made at the base of the flap, and should correspond as to size with the size of the *pus channels*, a due regard to the quantity of pus to be emptied being also had. A considerable suppuration may always be expected when parts of the flap mortify. The more intense the inflammation, the more considerable and deeper the suppuration, the greater is the danger, by means of local spread, of meningitis, and in the more advanced course, of pyæmia. Just for these reasons an exact reunion of the parts is doubly necessary, because also the wound surface is thereby diminished and protection is guaranteed against the harmful influences of the air. All hope of a union per primam, at least of a partial one, need not neces sarily be given up. even if some time (up to twenty-four hours) has elapsed since the wound was received. The difficulty of bandaging is then greater, because the borders of the flaps roll up and swell more and more. As for the rest, the rules that apply to bandaging and the laying on of sutures in general, hold good here. The application of ice is seldom necessary on account of the wound itself, but may be indicated by the condition of the brain. Every practitioner will be on the lookout for cerebral symptoms in all cases of wounds of the head; not existing at first, they may develop themselves shortly, although wounds of this kind very frequently run their course without them.

Tearing up the periosteum [pericranium], which sometimes takes place in contused wounds with flaps, demands especial attention. In favorable cases the piece of periosteum loosened remains unchanged on the inner side of the skin flap; in unfavorable ones it is lost with the other soft parts. In the first case the pericranium can heal on by primam intentionem, especially when the atmospheric air is shut out from the wound by bringing the edges into close union. This can even take place when the wound is not dressed for some hours after being made.* In other circumstances healing takes place by suppuration and granulation, sometimes with sometimes without *necrosis of the exposed* portion of bone. Necrosis is here best prevented by keeping the bone moist. If also, at any given point, the blood vessels running from the pericranium into the outer bone table are torn off, the nutrition of the bone is not necessarily stopped, as many anastomoses exist in the bone itself. But if the outer air is allowed to get to the bone for a long time, drying up and shrinking of the blood vessels that empty outwardly causes interruption of the circulation and consequent necrosis. Necrosis is unavoidable when with tearing up the periosteum, the vessels running into the outer table are not simply torn off, but are pulled out to some extent from the bone. The *treatment* then mu t have for its object to cover as rapidly and completely as possible the exposed portion of bone, and in cases of loss of substance of soft parts, to shut out the air by moist compresses.

The ordinary contusion without cut or flap is quite readily diagnosed, even by laymen. The circumscribed extravasation of blood caused by a blow or fall, whether situated in the subcutaneous tissue or subaponeurotic tissue, between the galea and pericranium, or between pericranium and the bone, demands much the same treatment. Generally such contusions are of minor importance, provided that symptoms of concussion (commotio cerebri), are wanting. It is best in this case even not to leave them entirely to themselves. As the blood cannot spread itself far in the very thick tissue, much difficulty is thrown in the way of resorption; a part of the coagulum may thus remain unabsorbed or may be decomposed by suppuration.

Treatment.—It is not to be denied that such contusions will disappear without treatment, but much can be done to aid nature and abridge the period of inconvenience to the patient. Often cold or so-called discutient bandages, with a moderate amount of compression, are sufficient to bring about resorption. Sometimes, however, these contusions are so considerable that compression is either inadequate, or too painful; in these cases leeches, or an incision with the scalpel, is indicated. Incision is, nevertheless, only to be employed when all hope of resorption has vanished, as resorption takes place often quite unexpectedly.

In these cases the contusion loses in size, and alters its form and color by becoming more flat, and changing its dark color for a yellowish tint. If resorption does not take place at all, and the quantity of extravasated

* Desault.

blood is considerable, inflammation may take place, and the more easy on this account, because the production of such extravasation naturally presupposes a considerable mashing of the soft parts.

Under such circumstances we must decide upon making an opening with the knife, and one of sufficient length to allow the blood to flow freely. In my own practice, I have rarely found this plan to fail. In some cases of contusion with abrasion of the skin, better and quicker results have been obtained. In these the more rapid disappearance of the contusion is due to the loss of blood and to the fact of the abrasion acting as a counter-irritant, without incision and with absorbent cotton dressing.

Fracture of the Cranium.

My definition of the term fracture of the cranium, being comprehensive and practical, embraces all wounds of the cranium in which the bone itself is either broken or penetrated, as for instance, by a bullet, or in which a piece or pieces of the bone are broken or split off in any manner by blows, falls, etc.

According as the wounding instrument comes with greater or less power more or less directly upon the bones of the cranium, it produces different kinds of disturbances in the continuity. Sometimes it leaves only a trace (hedra); or the bone may be perpendicularly split, and in its entire thickness (eccope); or it makes an oblique split like a flap wound of the bone (diacope); or finally a part of the vault of the head is entirely split off, so that it is either perfectly separated or remains attached only to the soft parts (aposkeparnismos). The *diagnosis* of wounds of the bone of the cranium is in general not particularly difficult, as the severing of the skin in its continuity at the same moment makes the examination more easy; but it is difficult to ascertain exactly the depth, the degree of contusion of the bone and the not unfrequent complications. If the wound penetrated or not, cannot always be fixed by the very cautious employment of the sound, and especially in narrow splits, how far splits and offshoots of fractures extend in the bone remains quite unknown. No matter how straight the instrument came into contact with the bone, nor how sharp its point or edge was, if the blow or other force was powerful, there is probability of a fracture or disunion in a suture, or sutures. From the corner of the wound a flaw or crack may run out unnoticed for some distance, and really a part of the inner table be sprung off. Only in the very rarest cases (in perfectly clean cut linear wounds from blows), does healing per primam follow; generally, under otherwise probable conditions, suppuration takes place and the wound-gap, when considerable, is only filled up by a fibrous scar that remains easily recognizable as an impression, or more properly, sulcus of corresponding depth between the rounded off and thickened edges of the bone. According as these were contused, or splintered, follows in general necrosis.

Prognosis.—All these conditions make the prognosis less favorable; for in the first place, they prove that the power of the wounding force did not and does not exhaust itself with the infliction of the wound; wherefore, we can always count upon more or less accompanying concussion or contusion of the brain, or at least, of the meninges; and, secondly, as a fracture of the bone has more uneven edges than a wound of the bone, there remains the probability of a consecutive inflammation within the cranial vault, and, therefore, on account of this, the greater danger. This is gravely increased when the inner table is splintered, as inflammation and suppuration must necessarily follow around that part of the bone. Nevertheless, we sometimes meet with wounds of the bones of the cranium without fracture, and accompanied by very slight commotio cerebri; these wounds are generally by sabre blows, especially when handled in the manner in vogue among the Arabs and Mamelukes; we know the rapidity with which the Damascus blades of the Orientals decapitate, partly by a pressing, partly by a sawing motion. When, therefore, the blade is not too thick or heavy, when it is handled in the manner of the Orientals, that is, so as to make a true, clean cut, a wound of the bone may be made without fracture at the same time, and by means of a suitable bandage the life of the patient may be saved. In these cases the weapon cuts into the bone as a knife into an apple. Examples of healing of such extensive wounds of the bones of the cranium, with accompanying exposure of the dura mater, and even of the brain, are not so very seldom. One example:* During the days of July, 1830, a citizen of Paris, believing himself followed by fifty individuals, had the madness to force his way through a squadron. The cavalry hacked his head into many flaps; one blow opened the cranium and exposed the dura mater. The wounded man was still able to find his way into a neighboring house, where his head was bandaged. Later, he recovered entirely at the Beaujon Hospital. Dupuytren ex-

* *Leçons Orales de Clinique Chirurgicale.* Dupuytren, tome VI, page 143.

hibited him in his clinic in 1831, that is, one year after the wounding.

Treatment.—From a therapeutical point of view we may, with Bruns, make the following technical distinctions upon which to found our practical treatment:—

(1) Clean cut wounds from blows that do not gap, are to be reunited and treated in the same manner as if no wound of the bone was made.

(2) Gaping wounds from blows, to which class belong also all flap wounds (if we may so speak), of the bones of the head, should never be reunited on the surface, because they always heal only by suppuration, and furthermore collections of pus may form in the deeper parts, or penetrating wounds between the cranium and dura mater. They must be treated from the very first with moist compresses with the utmost possible protection from the air.

(3) If a simple split wound of the outer table is found, while the cautiously introduced sound discovers a splintering or detachment of a portion of the inner table, the removal of such detached piece of bone, which would otherwise act as a foreign body, becomes necessary. In order to accomplish this the bone wound must be enlarged. This may sometimes be accomplished by means of an ordinary saw; in most cases, however, the trephine is the most suitable instrument for this purpose. In using it the regular cross cut should be made through the scalp, unless there was a wound already, as in the case under consideration; this should then be made of such sufficient size as to admit the trephine freely, which should be applied and bored slowly and cautiously, with its auger-like motion, through the bone—the round piece is then lifted out with the elevator. In abscess within the cranium the pus will then flow out, and in cases such as are now being discussed, the irritating portion of bone is removed. The trephine leaves a round hole in the cranial bone, corresponding exactly in size with the diameter of the crown used; this aperture fills out by fibrous shoots and granulations from the bone edges and dura mater, leaving a depression and weak spot, through which patients can hear. To protect this place metallic plates of gold or silver were formerly used; those of leather and gutta percha are considered better by some. Trephining is always an exceedingly grave operation and brings the life of the patient into danger. Although large portions of the cranium have been removed by the trephine and the patients have recovered, trephining, for the general practitioner, can only be a last resort.

Notwithstanding the above, trephining is indicated in the particular kind of fracture of the cranium described under (3).

(4) The examination discovers only a simple split wound in the cranium. But the power with which the wounding force worked causes fear that a portion of the inner table is sprung off. We must not, therefore, necessarily employ the trephine forthwith, but so conduct our treatment as though the inner table remained whole; in the first place, we are not sure, and then the probability that the inner table is not shattered by such a blow, is as great, if not greater, than the probability of a fortunate result from trephining unnecessarily. If cases present themselves which demonstrate, from the symptoms, that inflammation or extravasation exist under the cranial bone in the neighborhood of the wound, and these cannot be at once reduced by antiphlogistic treatment, it is our duty—even with but little hope of success—to trephine. The richer in diploë the portion of cranial bone wounded is, the greater the probability that the force of the blow did *not* extend into the inner table.

(5) Wounds from blows splintering both tables are to be considered and treated as comminuted fractures, that is, they demand especially the entire removal of all loose fragments of bone, to which end the widening of the wound already existing in the outer table is often necessary.

(6) If the portion of cranial bone loosened by aposkeparnismos still hangs together with the flap of the soft parts, there is a better prospect of success when we remove entirely such piece of bone and reunite the soft parts only, than when we attempt to heal in also the portion of bone with the rest. It would be very much to be desired were we able to close again completely the cranial bone, and, in fact, several observations are on record in which the healing on of portions of bone broken off succeeded; but the danger of necrosis of the same is too great to warrant such an attempt. Before bandaging, which is best done with the regular roller bandage, the edges of the hole in the bone ought to be carefully smoothed with the instrument and every splinter removed.

(7) If with the separated portion of bone the soft parts covering it are also hacked off, nothing then remains to be done but to carefully smooth the edges of the bone, clean the wound, lay on compresses moist with cool water, and apply a roller bandage, without exercising much pressure.

As regards the *treatment of separation of the sutures*, it must necessarily be directed against

existing complications. As mechanical interference is not indicated, an incision, for the presumable purpose of obtaining a more precise diagnosis, which is certainly very difficult when no wound exists, should never be thought of. Rest and attention to the bowels in cases of simple separation of the sutures are all that can be done, if we include a few small doses of calomel and cold applications. Concussion always accompanies separation of the sutures; often a more severe wounding of the brain is present. Upon this and its consequences rests the danger.

Compression of the brain from abscess, or formation of the cranial bones, or tumors, or other cause, if all antiphlogistic and alterative means fail, demands relief by the trephine. The row of symptoms called forth should be sharply distinguished from a differential diagnostic point of view, from those of commotio cerebri. The following table will be of service in determining exactly what the nature of such a case may be:—

CONCUSSION.	COMPRESSION.
Its working or effect takes place quickly, and over considerable extent; therefore, sudden prostration of the entire nervous system, to a greater or less degree.	Compression takes place gradually; its effects appear first some time after the cause. The paralysis attacks that side of the body whose nerves have their roots in the compressed part, preferably a limb, or one side of the body.
As the cause of *concussion* works quickly and transitorily, its *effect* is most intense at first, and becomes gradually less. Concussion produces suddenly a deep sleep that gradually disappears, taking away with it the remembrance of its cause; as it happens that the patients, when they awake again, have no recollection of the accident in question. Waking in concussion follows spontaneously, as the cause of the sleep is removed; nothing weighs, so to speak, upon the eyelids; they open themselves of their own accord.	The cause of compression works continuously, gradually increasing, or remains stationary at a certain point. It is the same with its effects; at first but slightly apparent, they become by degrees stronger. When the compression is extended, there is at first a slight stupor, a flighty sleep that at last becomes as deep as that which marks the beginning of concussion. It is, however, neither a soft sleep nor a lasting one, but continually more and more interrupted by excitations; the patient at the same time strives to keep awake, but is hindered from it by the compression.
The respiration is easy, the pulse small and regular; vomiting is often observed.	The respiration is difficult, stertorous; the pulse is hard, full, irregular; vomiting does take place.

Before trephining, digitalis, iodide of potash, and blisters may be tried in compression, but they will invariably be found to afford but little relief, and that only temporarily.

Fracture of the Base of the Cranium.—The symptoms that will assist us in making a diagnosis of fracture of the basis cranii (a condition of exceedingly rare occurrence, if we exclude gunshot wounds), are briefly as follows:—

(1) Bleedings from the nose, the pharnyx and external ear, of such force and duration that they cannot be attributed to the simple concussion.

(2) Suggillations (ecchymoses) in the region of the basis cranii; these appear during the first days, at a point which the wounding force did not reach—in the eyelids and conjunctiva bulbi.

(3) Of great importance is the so-called serous exudation from the external ear. The chemical composition corresponds somewhat with that of the cerebro-spinal fluid, and in almost all cases where the autopsy has been carefully made the local conditions of the wound prove themselves favorable for its outlet. The prognosis is always grave. Besides the concussion and wounding of brain substance usually accompanying fractures of the basis cranii, the dangers of pyæmia from suppuration of the bone, and of the inflammation spreading from the place of fracture to the meninges and brain, are to be feared.

Treatment.—Rest and keeping the head in such a position as will insure the most probability of the fractured pieces being in contact. All bodily or mental exertion must be avoided, low and restricted diet, with gentle purgatives, in order to prevent congestion to the head. Cold applications may be used cautiously, as by a too indiscriminate use of ice the reproduction at the point of fracture is hindered and necrosis caused. For the same reasons calomel and venesection should be very leniently resorted to, even when necessary. The use of the trephine may be indicated when the fracture causes brain trouble, and does not gap sufficiently to allow the pus to flow out of the depth.

Caries, exostoses, and tumors generally demand removal. It is never to be forgotten that in any dyscrasic tendency, much good may be derived from the exhibition of internal remedies; alteratives and tonics principally. This is especially advantageous in caries, which is easily distinguished from necrosis by its characteristic moisture, due to the fact that the bone still lives; while in necrosis it is dead, and consequently dry. If the affection is superficial the periosteum becomes fungoid and suppurates, the corresponding bone surface is rough, and hollows itself into

cavities resembling superficial erosions. Caries is a mode of termination of osteitis. If the affection has commenced in the thick part of the bone, that tissue becomes softer and softer, and takes a yellowish and brownish tint; the centre of softening is infiltrated with sanious pus, with a dirty gray ichor, that has a rancid and fetid odor; the bone becomes friable and porous, and there are formed on it anfractuosities that separate the osseous lamellæ, interspersed with grayish red fungosities, soft and bloody. Caries can heal spontaneously on organic change taking place, but it usually demands surgical assistance. If it is superficial, the pockets where pus is amassed ought to be freely opened, in order to discover the carious portion. We may then try (if there is no longer any irritation), baths and douches of alkaline, ferruginous, hydrosulphurous, and iodous waters; dressings with charpie dipped in the essential oils of turpentine, myrrh, aloes. Cauterization transforms caries into necrosis. If the bone becomes so carious as to resist all treatment, the only thing that remains to be done is to resect or trephine.

Hospital Reports.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

Surgical Clinic of Dr. Samuel W. Gross, Surgeon to the Philadelphia and the Jefferson Medical College Hospital.

Reported for the Medical and Surgical Reporter by Norman H. Chapman, M.D., Kansas City, Mo.

I intended to have two important and very interesting cases to bring before you to-day for operation, but as sometimes happens upon occasions like this, when we place too much confidence in individual cases, the patients disappear. It has so happened to day. The hour will not be without profit, however, for I shall show you a number of minor cases, such as will be among the first and most frequent cases in private practice. I will not detain each case long, but give you the points in reference to their nature and history which may be the most interesting and important.

Subcutaneous Ulcer Following an Operation for Fistula in Ano.

This man, a German (evidently about forty years of age), has some trouble about the anus. Upon questioning, he gives the ordinary history of acute abscess having formed in the ischio-rectal fossa, and of its subsequently having burst externally, discharging its contents alongside of the anal opening. He also tells us that he was afterwards subjected to an operation by cutting, which for a time seemed to have cured the fistulous track, but the old trouble, or rather a new one, seems to have returned, and he is at present annoyed with a discharge as well as with pain in the lower bowel while at stool.

Upon examination, I find a small opening at a distance of about eight lines to the right of the anal aperture, into which the point of a probe will enter. When this probe is passed well in, it can be swept about under the skin, and over towards the coccyx to a considerable extent. A cicatrized wound is also to be observed upon the right side, which shows that the fistulous track has been laid open, and subsequently allowed to heal. It will be noticed, too, that the opening into which the probe has entered is just above the margin of the upper part of the cicatrix. Observe also, that there are at present no symptoms of acute inflammation. Now, what have we? A subcutaneous ulcer which communicates with the atmosphere by a small opening, and not at all with the bowel. The surface of this ulcer is covered by a pseudo or false mucous membrane, from the surface of which is constantly being poured out a thin, ichorous and offensive discharge.

If this subcutaneous ulcer were allowed to remain as it is, it would go on *slowly increasing in size* for months and years, without the slightest attempt at resolution. Its surface is in an unhealthy condition and would remain so until changed by surgical interference. The thing necessary to be done in order to place this subcutaneous ulcer in a condition which will allow the parts to heal, is to divide the overlying integuments so as to convert the ulcer into an open sore. When this is done, resolution will take place by the granulating process. No stimulating lotions or other applications would do this subcutaneous ulcer a particle of good; an operation is imperative.

In operating, therefore, I pass in a grooved director, slit up the tissues which cover in this subcutaneous ulcer, and thus convert it into one which is open. I also dissect off the greater portion of the false mucous membrane and thoroughly scrape the remainder of the surface of the ulcer with the handle of the knife, in order to destroy any portion of this membrane which may possibly remain. By instituting this method of percussion, and converting what was a subcutaneous into an open ulcer, the parts will heal by the granulating process from the circumference to the centre, in the same manner as in a healthy open sore.

In the after treatment the parts will be packed with lint, which has been previously imbued with Monsel's solution of the sub-sulphate of iron, and covered with a folded towel as a compress, in order to keep up a gentle pressure; and subsequently the carbolized lint dressing will be employed.

We may expect that in from two to three weeks the whole ulcer will be entirely closed, and the man able to go about his business, without any discomfort.

Acute Phlegmonous Abscess in the Anterior Triangle of the Neck.

You will observe in this young man (who is apparently about nineteen years old), a decided swelling, which takes up a large portion of the anterior triangle of the neck; that triangle

which is bounded in front by the median line of the neck, behind by the sterno-cleido-mastoid muscle, and above by the body of the lower jaw.

As to the history of this tumor, the patient says that it began two weeks ago, apparently without any assignable cause, and has continued increasing gradually in size until the present time. We observe that the overlying integument is markedly discolored, and of a dusky red appearance. He complains also of pain, of a throbbing character, which is increased at night when in the recumbent posture. Upon examining the swelling, we find that it is soft, that there is fluctuation, and that immediately over the body of the mass is felt a distinct pulsation which is synchronous with beats of the heart. Do not be led astray by this symptom of pulsation, it is merely the result of the coincident that the swelling immediately overhangs the carotid artery. This is not an aneurism, and why? The pulsation is conveyed to the swelling from below, and is distinguishable only by placing the hand over the body of the mass, but is not felt when the fingers are placed upon its opposite sides, as would be the case were the tumor an aneurism. Then, too, the aneurismal thrill is absent, and the discoloration is not that of a bloody tumor.

In all cases of this kind, no matter how certain the diagnosis may appear, before recourse is had to the knife the exploring needle should be used. The most careful observer may at times be mistaken. Some years ago a prominent surgeon in Edinburgh saw a tumor situated below Poupart's ligament, which had been diagnosed by other and equally prominent men to be aneurismal; but his opinion differed from the rest: he was confident that it contained pus. He plunged in his bistoury and found it as he had anticipated. Again, he saw a tumor in the anterior triangle of the neck, which others had also pronounced aneurismal, but which he conceived to be the same as the one first seen. He opened it and caused the almost instantaneous death of his patient, and he himself was found dead the next morning in his office, so great was the impression the case made upon him. Remember this story and never forget to use the exploring needle, it will some day reward you handsomely.

A very good way of opening an abscess in the neck is to introduce an exploring needle, and then to pass in the bistoury upon its groove. In this manner you are pretty sure not to wound important structures, while at the same time a good, free opening is unhesitatingly made. The pus should be allowed to flow by atmospheric pressure.

The discharge from this abscess (which is a large one), is quite abundant, and the amount of suppuration which will take place in the next few days will give rise to considerable constitutional weakness. We will therefore place him upon the tonics of quinine and the tincture of the chloride of iron, giving from seven to ten grains of the former, and from thirty to forty minims of the latter during the twenty-four hours. An emollient poultice will be applied, for the double purpose of keeping up a free flow of pus and of preventing the opening we have already made from closing.

External Hemorrhoids.

As I separate the buttocks of this man, you will be able to see upon the right side of the anus an external pile, or hemorrhoid. The condition is a very simple one, it is nothing more than a clot of blood, which has been thrown out under the skin among the subcutaneous cellular tissues from the rupture of a hemorrhoid vessel. It is due, in the vast majority of cases, to straining efforts while at stool, during a condition of constipation. The passage of hardened fecal matter is always irritating to these little tumors, causing them to be more or less congested and frequently acutely inflamed. They are always the source of a great deal of pain and annoyance, and frequently incapacitate a person for business, or even to walk about or sit quietly in a chair with any degree of comfort.

This little tumor has only existed since yesterday, and I can scarcely say whether it is ripe yet or not. If an external hemorrhoid is opened before it is ripe, troublesome hemorrhage is very apt to ensue. And the means necessary to control this hemorrhage would only increase the severity of the already existing condition of affairs.

What I mean by an external hemorrhoid being ripe, is that the clot should be well formed. This point can always be ascertained by carefully examining the density of the tumor. If it is firm, hard and full, like a shot or bullet, when between the fingers, it is perfectly safe to remove it; but if it is soft and easily compressible it had better be allowed to remain and ripen.

When these tumors are small and recent, the local application of the compound ointment of galls answer very nicely, but when they are older some operative procedure must be instituted. The old way of treating an external pile, by cutting it off with a pair of scissors, and then allowing the parts to heal by the granulating process, is a barbarous mode of procedure; and the new way of treating them, by the hypodermic injection of strong carbolic acid, can scarcely be any better. By far the more satisfactory plan is to lay the tumor open, turn out the clot and make local applications of lead-water and laudanum or Goulard's extract. This is what will be done in the present case.

Nasal Polyp.

This man complains of difficulty in breathing through the right side of the nose. There is a sensation of fullness in the nostril and continued blowing of the nose gives no satisfaction.

By looking in at the anterior nares, there is plainly visible a white, oyster-like mucus, or gelatinoid polyp. The greater portion of the mass has the appearance of arising from the floor of the nostril, although, at the same time, other portions of the tumor seem to spring from the turbinated bones. There would, therefore, appear to be more than one polyp. In growths of this kind there is no fixed rule as to their number. Sometimes there is only one, and at others there are several, more or less closely clustered together. Their size may vary from that of a small shot, to being sufficiently large to stop up the entire nostril. They are always more or less hydrostatic in character, and in consequence be-

come more troublesome in damp than in dry weather.

Upon close inspection the gelatinoid polyp will be found to be moist, and of a spongy consistence; to have a smooth or lobulated surface; and to be surrounded by an investing membrane which is covered with cylindrical epithelium. The mass is more or less translucent, and nearly always presents a few small, straggling vessels, which give it a striated appearance.

Its minute structure is mainly a delicate cellulo-fibrous tissue, the interspaces of which are occupied by a sero-albuminous fluid, much of which readily drains off on puncturing the investing membrane. It also generally exhibits a distinct adenoid structure, the mucous glands being increased in number and considerably enlarged. Such tumors are devoid of sensibility, and commonly occur in persons who have passed the age of forty years.

In the treatment of gelatinoid polyp, tonic and astringent lotions may be tried at first, but they seldom effect a cure. Insufflations are more satisfactory; equal parts of tannic acid and Canada shakeroot have answered very nicely when well snuffed up twice or three times a day. When the polyp is situated near the anterior nares a very satisfactory mode of treatment is to inject (hypodermically) from ten to fifteen minims of Monsel's solution of the subsulphate of iron.

The most effectual means at our command, however, is that of removal by torsion, or twisting off the tumor at its base with the forceps. The forceps to be used in this mode of procedure should be well selected, for it is not every pair that will do the work. The best forceps with which I am familiar are made with long, narrow blades which are well serrated and sufficiently long to shut firmly together for a considerable distance. In each blade of this instrument you will notice there is also a narrow oval fenestra. In removing the growth after this manner, the polyp is firmly grasped as near its base as possible, and forcibly twisted or wrenched off. If only a portion of the polyp is removed at the first attempt, repeat the procedure until the greater portion of the mass is removed. The few fragments which may remain will usually shrivel up and disappear.

Two Tumors Involving the Lymphatic Glands of the Neck—Lymphoma and Sarcoma.

The first of the two cases involving the lymphatic glands of the neck which I shall present to you, is that of William F., aged forty years, admitted to the hospital one month ago, and whose history is somewhat as follows: About one month ago he first noticed a swelling upon the right side of the neck. Since then it has increased in size at irregular intervals, with the varying condition of the atmosphere; having a tendency to swell rapidly in damp weather, and apparently remaining stationary during dry states of the atmosphere. His family history is good, there being no evidence of the existence of pulmonary or scrofulous disease, and he denies ever having had syphilis.

You will observe upon the right side of the neck a tumor which rolls about easily under the fingers, thus showing that it is not adherent to the deeper seated structures. The mass is soft; it is glandular, and is composed of the superficial lymphatic glands of the neck, which are placed along the course of the external jugular vein and rest down upon the posterior margin of the sterno-cleido-mastoideus muscle. There is also detected, by running the hand well down into the supra-clavicular region of the right side, a solitary enlarged gland. On turning the head and looking upon the left side of the neck, the corresponding glands are seen to be similarly affected. They are also soft and movable, but the enlargement is as yet only slight. Such tumors are called lymphomas, and for the reason that they are composed mainly of enlarged lymphatic glands.

The growth of the lymphoma is simple. The lymphatic glands, as you know, are contained in a capsule of fibrous tissue, and made up of a delicate, reticulate network of vascular and fibrous stroma, and filled with lymph cells. In disease, these numerous lymph cells, which are in the interstices of this delicate stroma, proliferate rapidly by division, or endogenous germination, and force the gland to enlarge.

Lymphomatous tumors may arise from a variety of causes. They may be due to a strumous condition of the constitution, which has been inherited. From this cause a lymphoma usually makes its appearance about the age of puberty, and is most frequent in very delicate constitutions. A frail, delicate boy or girl, with a thin, pale skin, light hair and complexion, is predisposed to lymphatic enlargements. It is among these children that a few years later you will most frequently find scrofulous lymphoma. Again, lymphoma very frequently occurs in subjects where the white blood corpuscles are in excess, in persons suffering from leucocythæmia. When lymphatic glands become enlarged, from the increase in number of the white blood corpuscles, there is apt to be enlargement of internal glandular organs, the spleen, the liver, and the kidneys.

Lymphoma may also arise as the result of long continued irritation, as from a carious tooth. Then there is the simple or ordinary lymphoma which arises from an unassignable cause. Why the lymphatic gland should enlarge in these cases we cannot tell, we simply know that these glands are hypertrophied, and that is all. We simply know that the lymphatic cells and fibrous stroma go on rapidly increasing, but for what reason, we are unable to say. In cases where the lymphatic cells preponderate or are developed more rapidly than the fibrous stroma in which they are lodged, we get a soft fluctuating tumor which is malignant in character. In these tumors we find that the glands all around are enlarged, and that there are apt to be secondary deposits in the lungs, bones, connective tissue and the like.

Treatment.—Upon admission this man was placed upon a general tonic plan of treatment, of the tincture of the chloride of iron and quinia, with good diet and open air exercise. He was also given Fowler's solution, beginning with five drop doses and regularly increasing the amount until the toxic effect, as evidenced

by swelling of the eyelids and vomiting, was produced. German writers have great faith in arsenic when pushed to its limit, and particularly so in the malignant forms of lymphoma, but little was accomplished, however, in this case until one week ago, when the local application of the following ointment was made:—

℞. Iodoformi, ℥ iss
Extracti belladonnæ, ℥ ij
Balsami peruviani, ℥ j.
Unguenti petrolei, q.s. ad. ℥ ij. M.
Fiat in unguent.

The effect of the daily use of this ointment was most striking. In three days the tumor had diminished one-third in size, and to-day, one week from the time the ointment was first rubbed to the surface of the tumor, it is less than one-half its original size. The application of this ointment will be continued, and in addition the hypodermic injection into the substance of the gland, of five minims of Fowler's solution daily, will be advised. The progress of this case will be watched with interest on account of the marked effect of the ointment employed.

The second tumor which I shall show you today, involving the lymphatic glands of the neck, occurs in this young man, James F., from Reading, Pa., a hatter by trade, single, and twenty years of age. His history is as follows: About seven months ago the appearance of a small tumor upon the left side of the neck was first noticed. At this time the tumor was about the size of a chestnut, and there was very little pain at the seat of the growth. He tells us, however, that about two months prior to the appearance of the tumor there was great pain upon the right side of the face and forehead; that this pain came immediately after a number of very profuse hemorrhages from the nose, and that it continued severe long after the appearance of the tumor upon the left side of the neck. The size of the gland has gradually increased, until at present it is equal to that of a small orange. The redness visible over the surface of the tumor appeared two months ago, and was produced, the patient states, by the application of a plaster. This redness, however, has increased rather than diminished, since its first appearance, so that the plaster would seem to have had very little to do with the discoloration. The pain in the tumor, which was only slight at first, has of late increased very much, and is at present so severe as frequently to prevent his sleeping at all during the night. There is also history of night pains in the limbs and joints, but no history of specific disease. He has lost about twenty pounds in weight during the last six months, and his appetite is continuously poor. The hearing upon the left side is also much impaired.

Upon examination, we find a hemispherical tumor, nodulated in appearance and located to the left side of the posterior median line of the neck, and extending forward in such a manner as to encroach upon the posterior portion of the anterior triangle of the neck. It is of firm, dense consistence, and apparently movable. This movability is only apparent, however; the tumor is not circumscribed, cannot be picked up as in the other case, but is in reality firmly attached to all the surrounding tissues.

We have a number of distinct types of glandular lymphatic tumors; even the bony structures are not exempt, and the character of the one now before us is entirely different from that of the one which has just left the room. This one is a sarcoma. I know it to be sarcoma from the mode of its growth, intimate connections, character of pain and the like.

It would never do to remove this tumor, and why? From the natural history of such growths we know that they are made up mainly of connective tissue, and endothelial cells. That these cells of connective tissue type go on multiplying and developing themselves rapidly; that they advance from one structure to another through the smaller vessels, thus invading and infiltrating the surrounding parts. The veins of the neck, the nerves in connection with the chain of the brachial plexus, together with the intermediate structures, are so closely adherent, and all infiltrated with disease to such an extent, that the condition is utterly irremedial. Remember, now, that this man had characteristic pains upon the right side of the face and forehead, accompanied by ptosis, prior to the occurrence of the glandular enlargement upon the opposite side of the neck, and it would seem to me to be a sympathetic growth accompanied by a similar one in the brain. I believe the post-mortem, which must soon be made, will verify this prediction.

Editorial Department.

Periscope.

Animal Vaccination.

The *Popular Science Monthly* gives the following abstract on this subject:—

It becomes possible to affect sheep and cattle with a form of anthrax disease so mild as to bear much the same relation to the severer forms that cowpox bears to smallpox; and for this artificial affection with the mitigated disorder, Pasteur uses the term "vaccination." The question that now arises is, "Does this 'vaccination' with the mild virus afford the same protection against the action of the severe, that is imparted by cowpox vaccination against smallpox?"

To this question affirmative answers were last year obtained by Professor Greenfield, in regard to bovine animals, and by M. Toussaint in regard to sheep and dogs; the former, when "vaccinated" from rodents, and the latter from fluids "cultivated" outside the living body, after a

method devised by M. Toussaint, proving themselves incapable of being infected with any form of anthrax disease, though repeatedly inoculated with the malignant virus, and remaining free from all disorder, either constitutional or local. The same result having been obtained from experiments made by Pasteur himself, probably about the same date, with charbon virus, cultivated in the manner previously described, it was deemed expedient by one of the Provincial Agricultural Societies of France that this important discovery should be publicly demonstrated on a great scale. Accordingly, a farm and a flock of fifty sheep having been placed at M. Pasteur's disposal, he "vaccinated" twenty-five of the flock (distinguished by a perforation of their ears) with the mild virus on the 3d of May last, and repeated the operation on the 17th of the same month. The animals all passed through a slight indisposition, but at the end of the month none of them were found to have lost either fat, appetite, or liveliness. On the 31st of that month all the fifty sheep, without distinction, were inoculated with the strongest charbon virus, and M. Pasteur predicted that on the following day the twenty-five sheep inoculated for the first time would all be dead, while those protected by previous "vaccination" with the mild virus would be perfectly free from even slight indisposition. A large assemblage of agricultural authorities, cavalry officers, and veterinary surgeons having met at the field the next afternoon (June 1st), the result was found to be exactly in accordance with M. Pasteur's predictions. At two o'clock twenty-three of the "unprotected" sheep were dead; the twenty-fourth died within another hour, and the twenty-fifth an hour afterward. But the twenty-five "vaccinated" sheep were all in perfectly good condition; one of them, which had been designedly inoculated with an extra dose of the poison, having been slightly indisposed for a few hours, but having then recovered. The twenty-five carcases were then buried in a selected spot, with a view to the further experimental testing of the poisonous effect produced upon the grass which will grow over their graves. But the result, says the reporter of the *Times* (June 2d), "is already certain; and the agricultural public now know that an infallible preventive exists against the charbon poison, which is neither costly nor difficult, as a single man can inoculate a thousand sheep in a day." I have since learned that this protection is being eagerly sought by the French owners of flocks and herds; and if any severe epidemic of the same kind were to break out in this country, our own agriculturists would probably show themselves quite ready to avail themselves of it.

The Curability of Phthisis at High Altitudes.

A writer in the *Brit. Med. Jour.* says: The results claimed for the treatment of phthisis at high altitudes are of a sufficiently surprising kind. In some instances it is said that there has been an actual increase in the capacity of the chest—in the vital capacity, that is, as measured by the spirometer. This fact has been adduced as a proof of the radical nature of the "cure." Assuming the observations to be accurate (though it must be remembered that there are many difficulties surrounding the application of spirometry to practice), they are yet quite incapable of sustaining so weighty a conclusion. A chest in which a considerable degree of consolidation has occurred, but in which the disease has become temporarily quiescent, may very materially alter in shape. While the apices remain flat, or even, through cicatricial changes occurring in the lung, become more retracted, the bases may become expanded. The expansion is due to a compensatory hypertrophy, as it has been called, or, more properly, to a process of dilatation—a kind of "hypertrophic" emphysema, such as is seen in its extremest degree in one lung, in cases where the other has been permanently incapacitated by pneumothorax or pleural adhesions. It is quite conceivable that such a dilatation of the lungs, occurring over a wide area at the bases, might bring about an increase in the total vital capacity, even though some considerable portions of the apices remained unfit for use. We do not wish to prejudge the subject of the beneficial influence of high altitudes on a certain class of phthisical patients; we wish merely at this moment, when the flight of the *poitrinaires* is about to commence, to enter a protest against the too sanguine views which have been put forward. The experience of every physician will supply him with cases of phthisis in which, after a longer or shorter period of quiescence under conditions such as those to which we have above referred, a further extension of the disease has occurred with extreme rapidity in this dilated and therefore, not quite healthy lung. The artificial equilibrium which has been established is so readily disturbed, that a comparatively slight accession of disease may prove fatal in a short space of time.

On the Use of Tents and Bougies.

Dr. Edward T. Williams, writes in the Boston *Medical and Surgical Journal*, August 4th, 1881:—

The knife, in modern surgery, seems to be regarded as the panacea for every ill. It was otherwise among the ancients, who, though behind us in knowledge, often showed themselves before us in common sense. They always viewed the cutting instrument in its true light, as the surgeon's last and worst resort. The popular method of treating sinuses is a good illustration of this backward progress of surgery. We hardly hear nowadays of any way of treating a sinus except by laying it open. This leads me to speak of a simpler method which I have tried successfully a number of times—the use of tents. I speak only of simple sinuses, such as are usually treated by cutting. Take a narrow strip of sticking plaster and fold it, or roll it lengthwise between the fingers, as one rolls a slip of paper to light a lamp or cigar. Push it to the bottom of the sinus, and leave it three or four days, till it excites a healthy suppuration. Then remove the tent, bring the walls of the sinus together if necessary by a bandage or adhesive strips, and let it heal from the bottom, like a fresh wound. This acts on exactly the same principle as the knife or caustic, namely, by exciting an active

and reparative inflammation in the place of a chronic and stationary one. I do not say that it will take the place of the knife in all cases, but it certainly will in many. It is an old plan, but one that ought not to be dropped altogether out of mind. It is beyond doubt that *fistulæ in ano* have often been cured by this method, or by the seton, which acts in the same way, and that this is the real secret of the success obtained by certain empirics in the treatment of that disease.

Two special applications which I have made of the same essential principle I would like particularly to notice.

The first is the application of a *bogie à demeure* as a substitute for cauterizing or curetting the uterus in chronic endometritis. Pass in a common urethral bougie and let it remain a short time in the womb. I have never ventured to exceed five or ten minutes, but have seen it followed by a decided relief of symptoms.

The second is the same thing applied to the urethra (male) in cases of gleet and seminal emissions. Both these conditions, as it seems to me, are most frequently kept up by a kind of chronic prostatic urethritis, with probably a granular condition of the mucous membrane. The prostatic portion is super-sensitive, and sometimes bleeds a little on the passage of an instrument. The *sonde à demeure* is admirably adapted for these cases, and though perhaps less effective in a bad case than cauterization, has neither the risk nor the painfulness of that method. The principle, in all cases, is exactly the same, the substitution of an acute inflammation with a tendency to heal, for a chronic one with a tendency to persist.

The Treatment of the Vertigo of Bright's Disease.

Dr. R. Saundby says, in the *Brit. Med. Jour.*, even where we cannot hope to effect a cure of the disease itself, it is often of the greatest moment to be able to relieve a symptom which is rendering life worthless. Vertigo is not a very common symptom in chronic Bright's disease; but, though it does not receive much attention from text book writers, when it is present, it is a very serious matter to the sufferer, and often assumes a pre eminent position in his own account of himself. After trying various remedies, I have found the greatest benefit from caffeine or theine, in doses of one, two, or three grains, in pill, three times a day. The following cases are examples. S. K., aged 69, complained of severe giddiness, but proved to be a typical case of granular kidney; after taking without benefit chloride of ammonium, iodide and bromide of potassium, he was entirely relieved by caffeine in grain doses three times a day. J. W., aged 63, complained of giddiness, pain in the head, and loss of memory. The ophthalmoscopic signs were negative. The urine was of specific gravity 1.001; it contained a trace of albumen. She had frequent nocturnal micturition. She was ordered at first chloride of ammonium and digitalis; then theine in doses gradually rising to three grains, three times a day, when the vertigo was completely cured. I have notes before me of two other cases equally satisfactory.

The Effects of Ozone.

Dr. Barlow, in a recent work upon the effects of ozone on the animal economy, has not arrived at the same conclusions as Ireland, Richardson, Redfern, and others. His conclusions are as follows:—

1. Ozone depresses the nervous system, an effect probably secondary, and due to the excess of carbonic acid in the blood.

2. It lowers the normal number of respirations, and diminishes the force and frequency of the heart's action.

3. Inhalation of ozonized air diminishes the normal quantity of carbonic acid eliminated and of oxygen absorbed.

4. The diminution of the number of respirations which retards the movements of the heart, and the diminution of the quantity of carbonic acid exhaled, are probably due to the action of the ozone upon the pulmonary mucous membrane.

5. The alteration of the mucus may, if the ozone inspired be in great quantity, or if the air expired contain enough carbonic acid, induce death in an hour. from asphyxia.

6. If the quantity of the ozone is small, the alteration in the mucous membrane does not kill by asphyxia, but death is due to bronchitis.

7. Death by bronchitis can occur after a sojourn of an hour in an atmosphere containing one per cent. of ozone.

8. Ozonized air in direct contact with the blood decolorizes the red corpuscles, arrests the amœboid movements of the leucocytes, renders visible the nuclei of the globules, and gives life to the granulations in the serum.

9. The change of color of the globules is due probably to the combination of the ozone with the hæmoglobin.

Galvanism in the Treatment of Hemorrhoids.

Dr. Q. C. Smith, of Austin, Texas, in the Nashville *Journal of Medicine and Surgery*, for September, 1881, describes as follows the method which he has found most successful in this troublesome affection:—

We use one sponge-faced electrode, applied externally, to the region where most indicated—to the hepatic region and over the abdomen, if constipation detains, or to the dorsal region if backache is present, and so on. The rectal electrode is polished metal, nickel-plated, about three inches long, three-fourths of an inch in diameter, with wooden handle. If the case is recent, or the parts ulcerated or very sensitive, we apply the positive pole to the hemorrhoids. But if the parts are not tender, and especially if the tumors are old and tough, we apply to them the negative pole. In cases of long standing, when the parts are sensitive, we begin the treatment by applying the positive pole, but so soon as the tenderness is relieved, we apply the negative pole, and thus hasten the cure, as the tumors are thereby more rapidly melted down and absorbed.

Preparatory to the application of galvanism to hemorrhoids we always direct the rectum to be well cleansed with warm tar-soap-suds. The rectal electrode should be anointed with camphorated vaseline. While treating cases of hemorrhoids with galvanism, we have often ob-

served that the attendant constipation was relieved incidentally, and the relief thus brought about was more permanent than when cathartics were used. Many cases of hemorrhoids occur in females who suffer from some ailment of the generative organs. In the treatment of such cases of hemorrhoids, we have often observed that local treatment of the generative organs was more rapidly successful when simultaneous with the use of galvanism. We never use a current unpleasantly strong to the patient, or any but the constant current. Length of seances fifteen to thirty minutes, two or three times a week. Duration of treatment to effect a thorough cure, two weeks to two months. In all cases the following ointment is a valuable adjuvant to the galvanic treatment, and more especially, if extreme tenderness or ulceration obtains:—

℞.	Iodoform, in fine powder,		
	Ergotin,		
	Pow. nutgalls,		
	Pow. camphor,	āā	ʒ ss
	Pow. opii.,		
	White wax,		
	Vaseline,	āā	ʒj
	Cocoanut butter,		ʒj. M.

A convenient and effective mode of applying this ointment to the piles, is through a glass tube. similar to a glass-tube uterine applicator, fitted with a piston.

Action of Duboisia on the Circulation.

In a memoir on this subject in the current number of the *Journal of Anatomy and Physiology*, Dr. Gibson gives the result of some researches he has recently made. Duboisia, as is well known, is obtained from duboisia myoporoides, while another species, the duboisia hopwoodii, yields the stimulant narcotic used by the Australian natives, and named pituri. The properties of duboisia, the alkaloid derived from the duboisia myoporoides, have been investigated by Mr. Tweedy and Dr. Ringer, and by Dr. Fraser, and their researches have shown that it dilates the pupil, dries the mouth, quickens the pulse, arrests perspiration, produces headache, causes drowsiness, and finally induces tetanus. The conclusions at which Dr. Gibson has arrived are: 1. That duboisia in quantities not exceeding 0.005 gram raises the arterial blood pressure without materially affecting the pulse rate. 2. In quantities not exceeding 0·05 gram it diminishes the blood pressure and lessens the pulse rate. 3. In quantities of 0·05 gram and upward it causes death, with the heart in a state of diastole. 4. Upon the heart itself duboisia has but little action, except in very large doses—*i. e.*, doses of more than 0·05 gram—and it then causes arrest of the heart in diastole. 5. Duboisia stimulates the central inhibitory mechanism. 6. The alkaloid paralyzes the peripheral inhibitory apparatus. 7. Duboisia stimulates the central vaso-motor apparatus, and causes contraction of the arterioles in small doses; in large doses it lowers the activity of the central vaso-motor mechanism and dilates the arterioles. 8. Duboisia has no influence over the sympathetic nerve.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

—We have received in the form of a reprint from the *Archives of Ophthalmology*, for Sept., 1881, a paper on Sympathetic Ophthalmia, by Dr. Julian J. Chisholm, of Baltimore, giving the history of two cases under peculiar circumstances with sequel of surgical operation.

—In a reprint from the New York *Medical Journal and Obstetrical Review*, for November, 1881, Dr. James S. Green presents his views on the treatment of chronic club-foot, and gives the history of a case successfully treated without tenotomy, by continuous extension and stretching.

—"How to use the Bromides," was the subject of a paper, read before the American Neurological Association, in June, 1881, by Dr. George M. Beard, and published in the *Journal of Nervous and Mental Diseases*, for July, a reprint of it being now before us. An abstract of this paper has already appeared in the Reporter.

——In its department, the *Alienist and Neurologist*, edited by Dr. C. H. Hughes, St. Louis, Mo., is an excellent quarterly, and is also very well adapted to the wants of the general practitioner who would keep himself acquainted with this interesting branch of his profession. The prospectus for 1882 promises increased usefulness, especially in the department of clinical neurology. The subscription price is $5.00 a year, single numbers $1.50. Address the editor, 1710 Chouteau Avenue, St. Louis.

—A new edition of "Winter and its Dangers," by Hamilton Osgood, M.D., has just been issued in paper cover, in order to meet the demand for a low-priced volume. This is one of the American Health Primers series, edited by W. W. Keen, M.D., and published by Presley Blakiston, 1012 Walnut Street, Philadelphia. Like the other works of this series it deserves a wide circulation, as it gives in popular language a large amount of valuable information relating to the hygiene of the cold season. While the price of the "American Health Primers," in cloth, remains the same as heretofore, 50 cents per volume, this new form, paper, will be sold at 30 cents per volume.

BOOK NOTICES.

The Physician's Daily Pocket Record, comprising a Visiting List, many Useful Memoranda, Tables, etc. By S. W. Butler, M.D. Sixteenth Year. New and thoroughly Revised Stereo-

type Edition, with Metric Posological Table, etc. Edited by D. G. Brinton, M.D., Philadelphia. Published at the office of THE MEDICAL AND SURGICAL REPORTER, 115 South Seventh Street. 1882. Price: Arranged for Seventy Patients, $2.00; for thirty-five Patients, $1.50.

In entering upon the sixteenth year of its existence, the Pocket Record lays aside its plain dress and comes out in entirely new and gorgeous attire. Its general appearance, which always has been neat and elegant, will now be pronounced exquisite. It is printed on much finer and in every respect superior paper than heretofore, so that the thickness and bulkiness of the seventy patient Record is now not much greater than that arranged for thirty-five patients was last year.

Another change, with an eye for the beautiful, is the substitution of gilt edged leaves for the variously colored ones. It is bound in fine morocco cover, either supplied with patent clasps or the plain flap. The general arrangement remains the same as last year. It contains a perpetual almanac for fifty-seven years (from 1861 to 1917); the Metric System; general Posological Table (doses given according to both systems); doses for hypodermic injection, inhalation, suppositories, and pessaries; treatment of emergencies (poisoning, poisonous bites and wounds, asphyxia and drowning); examination of the urine; new remedies and pharmaceutical novelties; table of signs for Record; visiting list; record of accounts and memoranda; index to visiting list; table for calculating period of utero-gestation; obstetric record; vaccination record; addresses and memoranda; record of deaths; cash record. Nothing in the way of information has been omitted which it seemed to the editor might be useful to have ready at hand, while it has, at the same time, been compressed into the smallest possible space. We, therefore, feel confident that the Pocket Record will continue to gain popularity with the profession.

The Physician's Clinical Record, for Hospital and Private Practice; with Memoranda for Examining Patients, Temperature Charts, etc. Philadelphia: D. G. Brinton, 115 South Seventh Street, 1881. Price $1.00.

Most physicians in active practice have undoubtedly felt the want of a convenient Pocket Record, in which they could jot down right at the bedside of each patient the principal symptoms, such as pulse respiration, temperature, state of the secretions, etc., together with treatment. A regularly kept record of this kind would not only facilitate the study of each individual case, but would in the end form the basis for valuable statistics, etc. Moreover, a record thus kept would be apt to be more correct in its details than if taken down in a larger book after returning home in the evening after ended day's work; nay, it is the only way in which it could be kept free from error. The volume here under consideration is small enough to be carried in the coat-pocket, complete enough to allow of the essential entries and comments, and large enough to contain the entries of over a hundred cases kept under daily observation for two weeks. A small stencil plate accompanies it, to be used for sketching an outline of the thorax and abdomen, in which may be marked, by shading, the seats of effusion, the size of organs, the position of tumor, etc. The book contains, besides forms for clinical records and blank pages for stencil sketches, also temperature charts, memoranda for examining patients, examination of internal organs, and of the urine, together with symptoms of poisoning, etc., etc. The companionship of this Record will tend to make better diagnosticians as well as therapeutists, as it will not only compel the physician, as it were, to examine his patients thoroughly and to prescribe carefully, but also enable him at any time to study the results. We, therefore, think that no physician can hereafter afford to do without the "Clinical Record." It is gotten up in neat style and handsomely bound in cloth.

The Anatomist, being a Complete Description of the Anatomy of the Human Body; intended for the Use of Students Preparing for Examination at the Royal College of Surgeons, and other Medical Bodies. Second Edition, Improved and Enlarged, by the Addition of One Hundred and Seventy-one Wood Engravings. By M. W. Hilles, formerly Lecturer of Anatomy and Physiology at the Westminster Hospital School of Medicine, etc. New York: G. P. Putnam's Sons, 27 and 29 West 23d street. 1881. Cloth, 16mo. pp. 360.

With the excellent manuals of anatomy by American authors already in existence, the necessity for republishing an English work in this country seems questionable. Those, however, who may prefer text-books of foreign origin, and do not particularly care to encourage home authors will find the "Anatomist" as reliable as any other; and from its peculiar arrangement it seems especially adapted for a dissecting room companion, as it introduces the various tissues of the body, in the order in which they are encountered by the student while dissecting. The book is well illustrated, the cuts, which are all good, numbering one hundred and seventy-two

THE

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D. G. BRINTON, M.D., EDITOR.

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ADMONITIONS FROM PATHOLOGY.

A most cheering sign in the investigations in histological pathology of recent years, is the immediate practical bearing they have on the public health, the assistance they at once give to the sanitarian in the *prevention* of disease and death. It is no longer the time to indulge in hair-splitting distinctions between contagion and infection, and disputes as to fomites and quarantine. These researches show that the proximate cause of disease arises from pre-existing disease, and they emphasize in the strongest terms the importance of isolation and disinfection as means to check the perpetuation of the morbid process.

Another and significant lesson they teach is that there is a solidarity between the human and lower species in the forms and products of disease. Man holds no serene and superior position in this respect. His sufferings bring him into union with all the rest of organic nature. In his deteriorations and degradations he is subject to the same laws as other creatures, and would he understand these laws, and knowing them, shield himself from their baneful influence, he must study them as they act in the humblest forms of organic life around him.

How closely the pathology of the vegetable world is allied to that of the animal, and how much we can get from a study of it, has been pointed out by Professor GUBLER, and later by Sir JAMES PAGET. So little had the profession appreciated this, that the address of the latter, published last winter, surprised many of them, as opening an entirely new field of research. This exemplified how little pathology is looked upon as a broad form of natural activity, inseparable from every description of organic life, identical in its main features and uniform in its simple process throughout the whole realm of specialized existence.

Some of these ideas were forcibly put in a late address of Dr. CHARLES CAMERON, at the Social Science Congress, which met in October, in Dublin. He gave a review of the researches of PASTEUR, KOCH, KLEBS, and other recent investigators into the relation of micro-organisms to disease, and pointed out how interesting they were to the world at large; how really vitally important they are to the sanitarian, the philanthrophist, and the statesman. But we will give an extract in his own words.—

"In the first place, all this teaches, in every line, the necessity, from the standpoint of public health, of regarding every person suffering from an epidemic or contagious malady as a hot-bed swarming with living organisms which cause and spread the disease. It should be the duty of the public sanitary authorities to provide convalescent homes for patients recovering from serious infectious diseases, where they might be taken care of until all danger of the propagation of infection by them had ceased. Were this duty attended to, the recent discoveries as to the nature and causation of disease leave not the smallest doubt that we might be spared many epidemics, and that one disease especially—scarlatina—might be made to show a very different death tale in our tables of mortality. In the second place, the whole history of the chain of discoveries which have furnished the topic of this address seems to teach the enormous importance of the study of comparative medicine and pathology—of medicine and pathology, not in their connection with human diseases alone, but as branches of a science affecting the whole animal and vegetable world."

The results here named cannot be estimated too highly; they should be most carefully considered by the profession, and every effort be made to induce the governmental authorities of towns and states to act upon them. It is not a question of theories; it is no hobby-riding of particular "views;" it is an undoubted acquisition of knowledge which Dr. CAMERON refers to, and opens the way to save thousands of lives to the State; to guard thousands of parents from the bitter loss of their offspring, thousands of our fellow beings from the agonies of disease and painful death.

Here is a scope for philanthropical endeavor wider than HOWARD had in the prisons of Europe, more pressing than the dubious advantage of civilizing remote savages, more urgent than the suppression of war or the repression of population. Who will be its apostle?

NOTES AND COMMENTS.

Hip Deformity in Coxalgia.

At a recent meeting of the Socièè de Chirurgie (Oct. 5, 1881), M. Verneuil observed that he had treated a young girl, aged nine years, for coxalgia, by complete immobilization of the joint, for a period of three years and a half; she was cured without the slightest deformity remaining. About one year later he saw the young girl and found very pronounced deformity with apparent shortening, elevation of the pelvis, but without any trace of sensibility or of inflammation about the joint. Remembering the cases cited by Valtat in his thesis, where permanent progressive flexure at the knee, through paralysis of the triceps, without arthritis, ensued after prolonged immobilization of the joint, M. Verneuil sought if such could happen for the hip joint. And in effect he found a complete paralysis of the gluteal muscles in this young girl. The deformity was due to the tonic contracture of the psoas, the adductors and the sartorius, with an elevation of the pelvis difficult of explanation.

This case demonstrates, like many others at the knee and hip, that deformity may supervene late in the disease, without inflammatory symptoms, solely on account of the paralysis of certain groups of muscles and the tonic contraction of their antagonists.

M. Verneuil has sometimes, in such cases, obtained definitive cure by electricity, and he considers that it is to the contraction or paralysis of certain groups of muscles that the deformities (attitudes vicieuses) at the hip joint are due, in coxalgia. The abduction, external rotation and apparent lengthening of the limb, observed at the debut of coxalgia, are the result of the contraction of the iliacus and the gluteal muscles; the external rotation, adduction and shortening through elevation (ascension) of the pelvis, which supervene later, are due to the paralysis of these same muscles. The contiguity of these muscles to an inflamed joint explains the contraction at the debut of the disease; later on they become atrophied and we have the deformity of the second period.

Capsicum Annuum in Metrorrhagia.

M. Cheron, in the *Revue Med. Chir. des mal. des Femmes*, recommends strongly cayenne pepper in all forms of uterine hemorrhage, whether due to fibroid tumors or to fungous endometritis, or even to epithelioma. He was first led to essay this remedy by the good effects observed from its use in hemorrhoids. A large number of physiological experiments led him to consider it as having a special action on the vascular system, and hence on organs very rich in blood vessels, such as the utero-ovarian system, the organs of respiration and the brain.

Cayenne pepper acts like ergot on the non-striated muscular fibres of the vessels, either directly or through the vaso-motor system, and it has the great advantage over ergot, that it is well supported by the stomach, acting as a stimulant to its functions. The medicament can be given in pill form, two grains before each meal, increasing to four grains, or the watery extract in the same dose, or in tincture, much diluted and given more frequently.

Oakum as a Local Application.

The *Bull. de Therapeutique* states that Dr. Constantin Paul uses oakum with marked success in subacute diseases of the joints; it is simply wrapped round the parts in a layer of one to two centimeters in thickness, and kept in position by a bandage. It has proved useful in *arthritis deformans*, and a case of gonorrhœal rheumatism is mentioned in which its favorable action is described as astonishing. It is said also to succeed not only in articular affections, but in all cases in which iodine is recommended for external application. It produces the best results in bronchitis, and takes the place very efficiently of the Burgundy pitch plaster.

Remedies in Consumption.

In the *Practitioner*, for October, Dr. R. Saundby, recommends in consumption the symptomatical plan of treatment, and tabulates his remedies as follows:—

Specific; quinine, cod-liver oil.

Cough—liquorice, camphor, codeia lozenges.

Bronchitis—turpentine inhalations.

Purulent expectoration—eucalyptus inhalation, sulphate of iron.

Anorexia—quinine, peptonized food, malt extracts, cod-liver oil, ether, alcohol.

Diarrhœa—sulphuric acid, starch and opium enema, ergot enema.

Sweating—sulphuric acid, atropine, picrotoxin.

Hæmoptysis—sulphuric acid, ergot, ergotine.

If the patient be suffering from cough, profuse purulent expectoration, anorexia, diarrhœa, sweating, and slight hæmoptysis, it is very easy to combine the remedies in the following manner:—

℞. Quiniæ sulphatis, gr. j.—specific and tonic.
Ferri sulphatis, gr. v.—for profuse expectoration.
Acidi sulphurici dil. ♏ xv.—for sweating, diarrhœa, and hæmoptysis.
Aquam, ad. ℥ j. M.
Fiat mist. ter die sumenda.

This may have a minim of liq. atropiæ sulph. added to each dose if it should not check the sweating. In addition, the patient requires some liquorice, camphor, or codeia lozenges, and cod-liver oil, and perhaps wine; but, so far as medicines are concerned, only one bottle is needed.

If any symptom should assume greater importance, and not be held in check in this way, all other treatment should be suspended, and the remedies suggested for that symptom should be used alone until it is controlled.

Malingering in Children.

It is of the highest importance for physicians to understand that simulation and dissimulation are characteristics of certain temperaments at very early ages. Deliberate and persistent malingering is quite possible within the first decade of life. A striking instance in point is given in a recent number of the *Nord. Med. Archiv*:—

A girl seven years old, daughter of a laboring man, complained of pain in the knees and tendons of the legs, and lay in bed more than two months with her thighs drawn close up to the abdomen. After this, the child, who lived at a distance, was seen for the first time by Dr. Malmgren, and examined, with the result that no disease could be detected. The legs were now forcibly extended, and a bandage was applied. The next day, the child, being tired of this, declared that she could lie without being bent up. The parents took off the bandage; she lay straight, but said that she could neither walk nor stand on her legs. In this state her parents allowed her to lie six or seven weeks, in the belief that she was paralyzed. She now, however, conceived the idea of counterfeiting dumbness; she could no longer be induced to speak. Dr. Malmgren endeavored, by means of pinching and pricking and the induction-apparatus, to make her utter a sound; but not until she was told that she would be removed to his house, did she recover her speech and confess the deception.

We all of us remember the Danbury *News* man's description of the schoolboy's toothache, which commenced one hour before school, rose to a maximum in three-quarters of an hour, and disappeared miraculously just two minutes after he had been excused. More serious are the undoubtedly frequent cases of assaults pretended by young girls, often without any motive, whatever. Physicians should be extremely chary of crediting such statements unless supported by other evidence.

Sponge Grafting.

Such is the name applied by Mr. D. J. Hamilton, to a method of filling a vacuity with a prepared antiseptic sponge, which becomes organized, through its similarity to the growing tissue, and aids materially in the process of filling up a vacant part, as after excision of a tumor, etc. There is considerable novelty in this suggestion, and it may prove to have wide applications in the surgery of the future. Mr. Hamilton has a paper of thirty pages, with numerous illustrations, on this topic, in the Edinburgh *Medical Journal*, for November, at the conclusion of which he says:—

So far as I see at present, the method of "sponge-grafting" seems excellently suited for growing new tissue where that is insufficient to cover a part or to allow of stretching, but whether it may not have a wider range of application remains for future experience to demonstrate. The only objection which I perceive to its application is the somewhat long time required to organize it. During the first ten days I found that a part of a sponge placed in the abdomen had organized from an eighth to a quarter of an inch, but it always happens that

one part organizes quicker than another, and hence, although in a large wound one part may thoroughly organize in, say a month, other parts of same sponge require longer. I cannot see, however, what objection there would be to the patient going about, if this were practicable, after the sponge had once become fixed. On the contrary, I should think that this might actually, in certain cases, exert a beneficial influence upon the organizing powers of the tissues.

On the Use of Maltine.

Dr. Fothergill says, in the *Practitioner*, that in order to aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power, we add the artificial diastase, as "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather, it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter, and mixes readily with the milk, gruel, etc., without interfering either with its attractiveness in appearance, or its toothsomeness; indeed, its sweet taste renders the gruel, etc., more palatable. A minute or two before the milky mess is placed before the child or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and malnutrition.

Forms of Chronic Pneumonia.

With reference to the results of acute attacks, Prof. Charcot, in his "Leçons professées à la Faculté de Médicine," describes three distinct forms of chronic pneumonia, which may succeed to acute inflammatory affections of the bronchi and of the pulmonary parenchyma, and are often confounded. The first form represents the chronic stage of acute pneumonia, having its principal seat and origin in the alveoli. He termed this chronic lobar pneumonia. The second and third forms are chronic broncho-pneumonia, and chronic pleurogenic pneumonia, succeeding to inflammation of the bronchial tubes, or of the pleura respectively. These divisions are based on the primary seat and nature of the general lesion, all partial chronic pneumonias—such, for example, as are met with around tubercular deposits in the lung, being excluded. The first form, or chronic lobar pneumonia, is the result of the persistence of the pneumonic exudations in the alveoli—resolution being either slow, or frequent relapses of the acute disease occurring. The peculiar character of this form is the absence of dilatation of the bronchial tubes. The second form is always secondary to broncho-pneumonia. The great characteristic of this form is the dilatation of the tubes.

The Micrococcus of Blenorrhœa Neonatorum

Dr. Otto Haab writes, in a recent article:—These organisms appear to be identical with those found in gonorrhœa, the characteristic appearance being that in these secretions the micrococci are almost entirely confined to the nuclei and protoplasm of the pus cells, and do not appear to any extent in the intervening fluid. They are sometimes single, but more frequently double (diplococci), two spherules lying together, separated by an extremely fine interval. This undoubted existence of germs justifies the use of strict antiseptic measures in the treatment of ophthalmia neonatorum.

Anteflexion and Dysmenorrhœa.

The relation which uterine anteflexion bears to dysmenorrhœa was the subject of a recent paper which Dr. Hermann read to the Obstetrical Society of London:—

The purport of the paper was summarized in the following propositions: 1. There is no anatomical evidence that anteflexion causes any hindrance to the escape of menstrual fluid. 2. There is reason to think that well-marked anteflexion is present in nearly half of all women who have not borne children. 3. Therefore it is to be expected that anteflexion and dysmenorrhœa would frequently coincide. 4. Dysmenorrhœa is, practically, as common when the uterus is straight as when it is anteflexed. 5. Painless menstruation is, practically, as common when the uterus is anteflexed as when it is not. 6. When dysmenorrhœa and flexion go together, the severity of the pain bears no relation to the degree of the bending. 7. Dysmenorrhœa associated with anteflexion, is frequently cured without straightening the uterus. 8. There is no evidence that straightening the uterus invariably or even frequently removes dysmenorrhœa which is associated with anteflexion, and in which other methods of cure have been ineffectual. 9. These facts show that the relation between anteflexion and dysmenorrhœa is not that of cause and effect, but merely that of coincidence.

The Society expressed some difference of opinion as to the correctness of these propositions, but agreed that the paper was one carefully prepared.

Special Reports.

NO. XXI.—DISEASES OF THE KIDNEYS.

(*Concluded from p.* 663.)

RELATIONS OF RENAL AND CARDIAC DISEASE.

This forms the interesting theme of a paper by Dr. Robert Edes, printed in the Cincinnati *Medical News*, Nov., 1881. He collects a number of facts and observations, showing how closely diseases of the heart and kidney are allied. His conclusion is to the following effect:—

We cannot help seeing, from the facts to which it is the merit of Johnson, of Gull and Sutton, and of Mahomed to have drawn our attention, that the form of Bright's disease attended with interstitial nephritis is more than renal, and that the cardiac and vascular changes may occupy the foreground of the clinical picture. We must also observe how often organic disease, more or less marked, occurs in other regions than in the muscles of the heart and in the kidney, the peri and endo-carditis, the pleuritic adhesions, the endarteritis of large and small vessels, diminishing their elasticity, and thus demanding an increased expenditure of force to drive a given amount of blood, the usual coincidence of a similar interstitial hyperplasia in the ganglia connected with the kidney, and possibly its not infrequent occurrence in the nervous centres and their membranes.

We are brought by these facts to admit the existence of a fibro-hyperplastic diathesis, with perhaps no special tendency to particular organs except so far as influenced by their functional activity, but since the heart and vessels among the muscular organs, and the kidneys among the secreting, are more constantly active than any others, most frequently making itself manifest in these, with effects which vary with the different structure of the organs.

These new pathological views must excite considerable interest in others as well as students of this branch, as they point to a new and promising field in pathological investigation.

MORPHIA IN DIABETES MELLITUS.

In a well marked case of diabetes, Dr. Webber reports, in the Boston *Medical and Surgical Journal*, Sept. 22, 1881, clearly good results from a strict diabetic diet, backed by a quarter of a grain sulphate of morphia, twice or thrice a day. The Doctor speaks in his commentary as follows:

The benefit of the morphia treatment was immediately apparent. The only inconvenience from the morphia was the production of pain if the dose was taken too soon after eating. The patient was allowed to take it between meals, at such a time as should best guard against this discomfort, and doing so no unfavorable symptoms followed. Although for several days he took one third of a grain of morphia three times a day, it did not cause sleep nor give rise to unnatural drowsiness, thus illustrating the toleration of diabetic patients for that drug.

HOURLY VARIATIONS IN THE CHARACTER OF URINE.

In one of the recent numbers of the *Medical Record*, Dr. W. P. Mason gives some valuable observations on the hourly variations of the acidity, specific gravity, amount, and urea in the urine of a healthy man. Breakfast was at 8 A.M.; dinner at 1 P.M.; supper at 6 P.M. The examinations were made in cold weather. No great amount of out-door exercise was taken, but the subject was on his feet, engaged in active laboratory work, all day. The results are represented by the author in charts, but may be summarized. The curve of acidity rose slightly after breakfast, and fell at noon, then rose steadily to its maximum; at 3 P.M. it fell very low again; at 6 P.M. another rapid rise occurred, nearly equaling the last, reaching its maximum at 8 P.M., after which there was a steady fall to 11 P.M. The specific gravity varied less, falling, however, after breakfast, rising slightly after dinner, maintaining that rise toward night, with the exception of a drop from 7 to 8 P.M. The amount of urine reached its maximum at 3 P.M., rising to and falling after that time. The urea showed a rise about two hours after each meal, the maximum being at 3 P.M.

ALBUMINURIA IN THE YOUNG.

The frequent occurrence of albumen in the urine of young people was brought to the notice of the profession lately, by Dr. Clement Dukes, an English physician, who pronounced it to be physiological in character.

Dr. George Johnson, however, the eminent London practitioner, reviewed the matter carefully and stated his belief that all such cases are pathological. His reasoning led Dr. Dukes to a closer study of the subject, with the result that he also came to the conclusion that these are not physiological cases, but often the incipient stages of Bright's disease. He says, in an article in the *British Medical Journal*, Nov. 12th, 1881:—

Their *history* is this. An adolescent has symptoms that make me search for albumen; either morning headaches, disappearing as the day goes on; or marked dyspepsia; or increased impulse of the heart and arterial tension; or slight œdema observed in the face; or a feeling of debility, and even syncope; albumen is found, and is followed for years. The heaving heart; and the increased arterial tension are sometimes so marked that I can diagnose the albuminuria from it alone, and I am led to examine for it in consequence. Part of this increased cardiac and

arterial impulse may be physiological, and owing to causes connected with puberty; part may be due to the hyperæmia of the kidneys.

It is intermittent in *character*, occurring perhaps at one time of the day only; or one day, and then not again for several days; or several days, and then absent for weeks. It is also intermittent in *quantity*, sometimes copious, sometimes only a trace; but it is persistent in this intermission, and progressively increases.

Its *cause* varies. Sometimes scarlatina has preceded; sometimes it is hereditary; more often its cause is untraceable, it having arisen and progressed insidiously. Microscopically, there are no casts or cells. That this albuminuria is not connected with the secretions of puberty, as has been suggested, is beyond question; for, whether it be copious or scanty, old or recent, it can be got rid of in an hour or two by putting the patient to bed and giving milk only; and it can be reproduced almost at will, by getting up and giving more diet. That it is owing to hyperæmic kidneys is, I think, clear.

In the same journal cases of albuminuria are recorded in children of the age of three and a half and five months.

CANCER OF THE KIDNEY FROM THE IRRITATION OF A CALCULUS.

A specimen supposed to illustrate this was recently shown to the Pathological Society of London, by Dr. N. Moore. It is a most interesting point, as bearing on the general etiology of cancer. In the specimen mentioned, the kidney was very much enlarged, and its pelvis was occupied by a calculus weighing about three ounces and a half. There was some calculoid material plugging the ureter, which was considerably thickened. There were no secondary deposits. Microscopically, the new growth was found to be epithelioid, originating in the kidney tubules. It was no doubt, therefore, a primary cancer of the kidney, apparently resulting from the long-continued irritation of the stone. The patient was only twenty-five years of age. Many years ago, when a child, he had fallen from a swing, and had complained of kidney pain, and had since passed blood in his urine, and also pus.

The President, Dr. Samuel Wilks, remarked on the analogy of this case with cancer of the liver produced by the irritation of gall-stones.

OXALATE OF LIME IN THE URINE.

The presence of this substance in the urine is the subject of a paper by Dr. J. B. Marvin, published in the September number of the *Medical Herald*. He states that he knows of no more frequent cause of the temporary appearance in healthy urine of oxalate of lime, than the free use of tomatoes and carbonated beverages during the hot weather, when the skin is acting freely, causing a diminished flow of over acid urine.

He adds: I do not believe in the so-called oxalic acid diathesis or oxaluria. The oxalate of lime is the result, and not the cause, of the numerous symptoms which have been described as being associated with it. In the great majority of cases, certain disorders of digestion are the cause of the so-called oxaluria. I would not have you think lightly of the frequent or persistent presence of oxalate of lime in the urine. Two serious results may follow its presence; structural disease of the kidney, or formation of a calculus; pyelitis, catarrhal or suppurative, and parenchymatous disease of the kidney may result from the continued irritation caused by the passage of microscopic calculi of oxalate of lime.

In regard to treatment, he does not offer much that is new. The general lines he lays down thus:—

Keep the skin clean and active; more out-of-door exercise, less spirituous drinks, and proper attention to quality and quantity of food. The routine treatment, by nitro muriatic acid, does good frequently, not by dissolving the deposit, but simply by improving the digestion. Frequently it fails. Alkalies, with bitter infusions, sometimes act happily, especially if the urine is scant in quantity and of high specific gravity. Oxalates being soluble in acid phosphate of sodium, I have been using for several years, with success, Horsford's acid phosphate, in drachm doses, well diluted, before each meal. This is an agreeable mixture, aids digestion, and acts as a mild diuretic, and tonic. Phosphate of sodium, in solution, with phosphoric acid, would doubtless act as well. In case a calculus has formed, the treatment varies according as the stone is renal or vesical. If the latter, it is obvious that surgical interference is necessary. If renal, we try to prevent any additional formation by such treatment as is outlined above. Withhold such foods and drinks as increase the formation of oxalates; apples, tomatoes, carbonated drinks, etc. If the stone is large and giving much trouble, as indicated especially by suppuration, nephrectomy is called for, and in the light of recent experiences, undoubtedly justifiable.

No doubt these are useful rules for practice.

THE USE OF BETHESDA WATER IN DIABETES MELLITUS.

This is reported on in the *Brit. Med. Jour.*, by Dr. Wm. Murrell. The case was far gone when he began, and it terminated fatally. The observed results were as follows:—

1. The average of the last eight days of ordinary diet gives 367 ounces of urine and 10,559 grains of sugar *per diem*.
2. The average of the last twelve days of ordinary diet and Bethesda water gives 365 ounces of urine and 10,493 grains of sugar *per diem*.
3. The average of the last twelve days of restricted diet gives 146 ounces of urine and 2,403 grains of sugar *per diem*.
4. The average of the last eight days of restricted diet *plus* Bethesda water gives 180 ounces of urine and 2,987 grains of sugar *per diem*.

Dr. Murrell's opinion is that the Bethesda

water deserves a more extended trial, both in diabetes and in Bright's disease.

The immediate cause of the death in this case was acetonemia.

Correspondence.

How Long May the Fœtus Survive the Mother?

Ed. Med. and Surg. Reporter:—

On the 14th of October, 1881, I was called by a messenger, a lad of twelve or thirteen years of age, who said that Mr. Thomas wanted me "to come and see his wife," and added that he was told to tell me to be as quick as possible, for she was dead! It was a strange message, indeed, requiring me to go to see a dead woman; but recollecting that I had heard it said that the lady was enceinte, I thought it was possible that she had been unexpectedly taken in labor, and had flooded to death, and that the husband had sent for me with the hope of his wife's resuscitation. With this idea in my mind I ran to the house, a distance of eighty or a hundred rods, and met one of the neighbor women, who said, "Doctor, isn't this horrible?" "What is the matter?" "Why, Mrs. Thomas has fell into the branch and is drowned." I went on into the house and found the woman lying on the edge of a bed with her clothes wringing wet and her body cold and limber; face purple, and froth running out of the nose slightly; there was some mud and sand in the nostrils; pulling open the clothes, the breast showed a pinkish congestion; there was not the least sign of a pulse or heart beat. She was turned over on the side and chest and artificial respiration commenced, by raising and lowering the arms, and compressing the back of the shoulders. This was done several times and then the body was allowed to turn on the back again. I now thought of the child in utero, and I laid my ear over the womb, and found the fœtal heart could be distinctly heard, and the motions of the child could be felt besides. The heart would run along for several beats pretty regularly, but very fast, and then end up with a tumultuous flutter of the child in its prison. I now demanded assistance in the case, in order that the child might be delivered by Cæsarean section, if by no other operation. A tub about half full of clothes and water was standing in the room, and I ordered it emptied, and the woman was placed upon the side of it and gently rolled, as if on a barrel, for a few times, and while on the tub, another attempt at artificial respiration was made. Artificial respiration was kept up until I, at least, was tired out, and again she was put back upon the bed and the fœtus again examined. It was still alive, although not a sign of returning life could be discerned in the mother. In order to prove the correctness of my judgment of the condition of the child, I sent for my stethoscope; in the meantime the artificial respiration was kept up.

When the stethoscope came I again examined the condition of the fœtus, whose heart sounds could be yet distinctly heard, as well as the motions of the child felt, which motions were now of a shuddering character. A neighboring physician now came in, who, by the way, is an irregular, and I told him hurriedly that the reason I had sent for him was to consider the advisability of delivering the child by the Cæsarean operation. By this time the house was full of curious and excited people, who, when I mentioned taking the child away from its dead mother, threw up their hands and cried out in horror. "that it would never do in the world, and that the child would not live anyway." I asked the husband how long the mother would have gone until her time was up, and he said about ten days. I asked him then if the child should be delivered or not, and he replied, "I don't know what to do; you know your duty, do it." Then the "prominent" man of the village again spoke up and said it would not do; and then another "prominent" man, who always follows the other one in all he does, chimed in and said it would not do, in his judgment, to deliver the child, as it would not live. I said he didn't know whether the child would live or not, nor I would not undertake to say that the child would if it was delivered, but that I did know that if it remained where it was, it was bound to die. The "Doctor" now had found out which way the popular wind wa blowing, and thought "it would probably be a useless operation."

The fœtal heart was still going, and I told the Doctor so, and he laid his hand upon the womb and said that the womb was warm. Sure enough it was. A fire was ordered built by me, about the time the Doctor arrived, when it was ascertained that every bit of the fire had burned out, save one or two little sparks that were found imbedded in the ashes. The wash-boiler was on the stove, containing clothes which the women who were present thought had been boiled. My counsel had left the room with the prominent men, and I was now on my own responsibility, to act as I pleased. I determined, if the mother in-law was present, and was willing, with the husband, that I would extract the child by myself. She was not in the place, and did not come for over a half an hour. During this time, I, with the rest, set to work to find out, if possible, how long the woman had been dead. It was thought, from the water being cold that she had been washing in, and from the fire being out, and all other indications in the house, that the woman had been dead an hour and a half or two hours. And from the fact that the slop-bucket was found in the branch beside her, it was thought that the woman, after washing awhile, had carried the morning's slop to a pig which was in a pen on the opposite side of the branch to the house, and in returning to the house with the slop-bucket, had taken a fit, which she was subject to, and fell off of the crossing into the branch, which was from eight to eleven inches deep in water. When the husband came home from his work at noon, he found his wife lying on her back, with her head in a hole, which on measurement was found to be about eleven inches deep, with the water flowing over her face. He pulled her out of the water and called for help, which, when come, assisted him to carry her to the house, and then the messenger was sent for me. It was fifteen or twenty minutes after twelve o'clock when I first saw the case, *and the fœtal heart continued*

to beat until about half-past one, keeping up its beating for an hour and a half after I got to the mother, who was thought by everybody, myself included, to be dead. (The woman that laid her out said they felt the fœtal movement up to near 2 P.M.)

Now I have written this, first, to ask the profession how long the fœtus in utero will live after the death of the mother; and secondly, to make a confession of neglected duty. On the first point I am unable to learn anything definite from my brother practitioners in the neighboring towns, nor can I find anything satisfactory in my limited library. The only information I am able to get from the library is from the MEDICAL AND SURGICAL REPORTER, vol. xli, page 166, and that goes entirely counter to the above detailed experience of the writer.

I want to know how was it possible that the fœtal heart continued to beat for an hour and a half after the mother was dead, if dead she was? There is not the slightest suspicion of foul play by any one, from the husband. In talking with my preceptor, Dr. J. J. Ferry, of Taylorville, Ill., he said he could conceive how the fœtal heart might continue to beat in this way, viz., That at the moment of the seizure of the woman with the epileptic fit the heart had contracted vigorously, and had filled the arteries entirely full, and that the fœtal heart would continue to beat until the capillaries had dragged the whole amount of the oxygenated blood out of the vessels and into the placental circulation. I have this objection to his explanation, viz , it is said (Dalton) that the time occupied by the circuit of blood is only about twenty-five seconds, and I can't see why the circulation should be so slow after the vis-a-tergo force was removed.

Mrs. Thomas was about twenty-seven years of age, had been married a little over four years; she was light complexioned, and had red hair. She was taken with her first fit about her twelfth year; was carrying a bundle of pea-sticks in the garden and fell to the ground without warning. Another fit followed in about one year. The third fit occurred in August, 1877, following a long spell of continued fever, on the first day after her illness that she undertook to do any work; was getting dinner and was suddenly seized with a fit, which, in all the stages, "lasted part of an hour;" resumed her preparation of dinner and ate her meal with relish. The fourth fit came on in a few months after her marriage, in June, 1878. The fifth fit occurred only a few days before her child was born, which was on the 5th of February, 1879. The sixth one occurred on September 26th, 1881. This is the only one of which she ever had any warning of their coming on. The seventh and last fit was on the date of the beginning of this artic'e. J. J. CONNER, M.D.

Palmer, Ill., November 28th, 1881.

Questions in Vaccination.

ED. MED. AND SURG. REPORTER:

As I have a high appreciation of your able journal, and for no one thing more especially than the means it affords its readers for intimate communion with each other through its column for "Queries and Replies," I will, with your permission, attempt to throw some light on the subject inquired of by Dr. E. C. Helm, of Chicago, Illinois, in your last issue.

In reply to his first question, I would say that there are persons who resist the influence of vaccination, and also of smallpox, after repeated exposures, and live to old age without having taken either disease. But that it is altogether possible that there have been periods when, if properly exposed, they would have taken either of them. I have a brother, now fifty years of age, who has never been successfully vaccinated, although after repeated trials during infancy, youth and manhood, I did with my own hands give him a very full inoculation of *warm bovine lymph*, directly off of a heifer that was furnishing virus of the most active kind. He has also been exposed to smallpox contagion, and has never taken the disease. The answer to No. 2 is included in the above. In reply to query No. 3, I would most emphatically say, that as I have known that the child in utero can be influenced by variolous poison through the mother, so can it also take on the vaccinous infection, and that it will, for a time at least, be protected from either vaccinia or smallpox. The answer to No. 4 is, that it is altogether possible. Cicatrices, from the same causes, differ very much in character and degree in different individuals, and while there should be a *typical* vesicle and scar following vaccination, both the vesicles and the resultant scars differ to a considerable degree especially is this the case when bovine lymph is used. After it has passed two or three times through the human subject the peculiar areolated vesicle followed by pitted cicatrix is more certain to be found.

As more space would be required to fully answer the inquiries of Dr. H. than your journal can afford, I would respectfully refer him to Seaton's valuable "Hand-book of Vaccination," and would direct especial attention to chapter IX, which treats of "Skill and Success in Vaccinating, and of Insusceptibility to Vaccination." The whole chapter fully sustains the position I have taken in these answers; but my own experience with individuals insusceptible to the influence of both diseases would make the proportion of such persons in this country much larger than has been found to exist in England, at least at the time of the publication of the above book, viz., 1868. In a foot note on page 196, I find that "of upward of nine thousand vaccinations performed at the Blackfriar's Station of the National Vaccine Establishment since 1859, there has been but one case which on a second trial was unsuccessful. In this a third attempt was made, but the child was not brought back for inspection, and the result is unknown." In conclusion, let me say, for the benefit of the virus sent out by all other producers, as well as for that sent out by "Jenner Vaccine Farm," that the want of success in vaccinating, in ninety-five out of every hundred cases, is owing more to the want of care in keeping the lymph after having procured it, and to *want of skill* in introducing it into the arm. This last proposition, I am aware, will be hooted at by many, especially by those

who boast of the experience that a thirty or forty years' practice has afforded; but alas, too few of these gentlemen appreciate the fact that while the operation of vaccinating appears to be a very small one, a *great deal of skill* is required for its proper performance. This is a fact that Jenner, Ring, Dunning, Bryce, and many others fully understood, and they strongly insisted that persons should be *specially* instructed in the work, and that they should be possessed of a competent knowledge of that which they have to do.

J. L. Suesserott, M.D.

Chambersburg, Pa., Dec. 5th, 1881.

Ed. Med. and Surg. Reporter:—

In a late issue of your journal I find some interesting views in relation to vaccination expressed; besides a few questions asked.

To the first question, I would say that there is in *no one* any such thing as insusceptibility to the action of good vaccine virus, properly inoculated, and that there is no proof of any protection without the scar remaining plainly visible at the part of the body where the insertion was made.

Second question. The absence of a cicatrix, even if the person has been repeatedly vaccinated, is no proof whatever of immunity from variola. Those physicians who maintain that because it does not *take* is an indication that it is not needed, evidently have had little experience with smallpox.

Third question. No doubt but effectual vaccination of the pregnant female secures, *for a time*, protection to her offspring.

Fourth question. No number of vaccinations without that indelible scar afford any protection whatever. I would say that I feel justified in giving these emphatic answers, for the following reasons:—

Within the past year I have made many thousand vaccinations, while on the New York Board of Health. I have seen (and I can prove, if necessary, what I write, by reference to cases), more than once, instances wherein vaccine repeatedly failed, and the person was afflicted with variola.

I remember a young Hebrew, ten years old, who was vaccinated year after year, without effect. This summer smallpox broke out in the house where he lived. More than four different families had the disease simultaneously. The boy's parents, in their anxiety for their boy, had him vaccinated four times within three weeks, while the disease was raging under their roof. The boy's sister, a young woman, was stricken down, but having been well vaccinated when a child, had only a few pustules on her arms, and was not confined to bed. All at once the lad was taken with the disease, in its most severe form, and recovered only with the best of care, after passing through a most terrible struggle. Another young girl of twelve years. She had been vaccinated many times with no effect. Her parents hearing that variola was prevailing, had her again within one month twice vaccinated, and the efforts of the surgeons were futile. The traces of the lance were plainly noticeable, when she was stricken down and died within one week from the time she took the bed. Possibly, it may be that those whose symptoms are antagonistic to vaccination may not *so readily* acquire smallpox; but of one thing there is no doubt, and that is, when the disease does attack them, it does so with all its malignity.

Vaccinate, and keep at it, if you are exposed. Use lymph of the point, no crust, and try the leg if the arm does not respond. You are not protected, if anywhere within (the range) of smallpox contagion.

T. H. Manley, M.D.

New York City.

News and Miscellany.

Correction.—In our report of Dr. Duhring's lecture, Reporter, Nov. 26th, he is credited with prescribing *half grain* doses of biniodide of mercury. It should read *one-twelfth* of a grain for each dose.

The Good Accomplished by the National Board of Health.

The great practical benefits derived by the country from the action of the National Board of Health is well set forth in Dr. Chaillé's report of its working in the Mississippi Valley this past summer. He says:—

"Granting that sanitary officers are the victims of the usual human infirmities, there can be no doubt that the two services, National and State, served to stimulate the vigilance and zeal, the one of the other. Great confidence is felt, and instances could be given to prove, that the presence of the national inspectors did tend to increase the efficiency of the State sanitary authorities in the discharge of their duties, and that good was done thereby.

Even unfounded rumors of yellow fever inflict much injury on New Orleans, if not promptly denied by those in whom perfect confidence is felt. Such confidence was felt and expressed in the local officers of the National Board of Health, even by Memphis, which is now, for good reason, the city most easily alarmed as to yellow fever, that there, as everywhere else, rumors were promptly suppressed as soon as official assurance was given that they were groundless. My attention was called to not less than a dozen rumors or causes for rumors, for the most part early in the season. All these proved to be groundless, and when assurance was given, not only of this, but also that information would be promptly given of any which might prove to be well founded, the rumor manufacturers, silly and timid, rather than malicious people, abandoned their occupation before the season was half over. There can be no doubt that many persons within, and many more without New Orleans bestowed great confidence on the National Board of Health; that great satisfaction was derived by them therefrom, and that much good was done.

The agents and officers of river craft and railroads were disciplined in sanitary inspections and precautions to an extent calculated better to prepare them for compliance with the more rigid discipline which would be indispensable, in a season of danger, for the protection of other communities. It is believed that much good was thus effected.

Finally, the presence of the officers of the National Board of Health with the avowed intention of reporting, not only the truth, but the whole truth, and of hesitating at no measure within their power calculated to protect adjacent States, has tended, undoubtedly, to arouse discussion, to disseminate sanitary information among the people, and to stimulate them to sanitary progress. Much good has been and will be due to this."

We would especially call attention to the force of this last paragraph. Most local Boards of Health have not and do not deserve any respect, from their inveterate habit of lying—not to put too fine a point on it.

Statistics of Suicide.

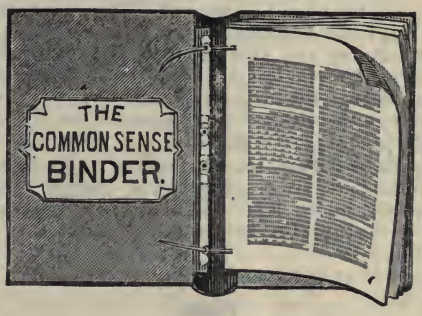
The little book of Dr. H. Morselli, lately published, gives some curious statistics of suicide. The facts of the increase and regularity of suicide would be most disheartening, were it not for the healthy summation that "the formation of character is the cure of suicide." "All that causes retrogression in a State or in a class of men is a cause of suicide." This principle covers even bad years of agricultural distress, financial crashes and manufacturing dullness, as well as all letting down of the individual by excesses in drink and dissipation. It might check a certain class of egotistic or vain suicides—the stamp Guiteau would be were he not such a coward—to know that the very fact of their taking themselves off proves that they belong to the weak and not highest order of human beings. Among religions the Jews show the smallest percentage of suicides, 48.4 per million; among Catholics the percentage is 62.3; among Protestants, 102.7; among other Christians, such as the Greeks, etc., 36.2 Dr. Morselli's researches are carried even into the statistics of special trades, all going to show that the trades which create luxuries have more fluctuations, and, therefore, more despairing suicides than the workers in necessary industries. At the same time, the agricultural list is heavy in some countries, while fishermen hardly can be said to kill themselves at all. The tables are made out for the whole of Europe, with special maps of "intensity" for the leading States. English women between fifteen and twenty kill themselves in larger percentage than the men do, and, in fact, up to thirty years this disproportion shows itself. Upon the continent generally the proportion of men who make away with themselves is much greater than that of the female sex. In cold countries suicides do not drown themselves; in Italy they do. But in the country of Ophelia, Danish women, up to the age of thirty, continue to choose this mode of death. Winter is not the time of year when suicides are frequent; the hot months are selected in preference. This remarkable book is an index to human misery—as well as to the subject of its title.

Death Rate in New York.

Although the death rate in Philadelphia has been remarkably high for the last six months, yet the increase does not compare with that reported from New York, where, during the last quarter, the number of deaths has been equivalent to a yearly rate of 35 per 1000 population—double the rate that Philadelphia has shown in its good years. The mortality among children in New York has increased nearly 50 per cent. over last year. For three months of 1881, there were 6102 deaths, as compared with 4401 in the corresponding period of 1880.

Russell's Common Sense Binder.

We give below a cut showing the form of this binder, which we have found the best we ever used. A number have been prepared, of a size to fit the REPORTER, and are lettered in gilt, with its name. They will be sent by mail, to suit subscribers, on receipt of seventy-five cents.



At the close of a volume, the numbers can be removed from the binder and regularly bound, or they can with equal convenience be left in it, and another binder be used for the next volume.

Effects of Hand-Shaking.

A writer in the Providence *Journal* condemns the custom of miscellaneous hand-shaking as inconvenient, useless, meaningless, liable to transfer diseases, and painful when carried to the extent which prevails in public life. On a previous occasion we have pointed out the absurdity of the custom, and fully concur with this writer in his conclusion:—

President Arthur is a man of fine presence and great social tact. Let him distinguish himself by substituting some more dignified and graceful ceremony for the rough form hitherto characterizing introductions at the American court.

College of Physicians and Surgeons of Chicago.

This institution has been recently organized, with the following officers:—

President, A. Reeves Jackson, A.M., M.D. Vice-President, S. A. McWilliams, A.M., M.D. Secretary, D. A. K. Steele, M.D. Treasurer, Leonard St. John, M.D. Board of Directors: A. Reeves Jackson, M.D., 271 Michigan Avenue; S. A. McWilliams, M.D., 125 E. Eighteenth Street; D. A. K. Steele, M.D., 1801 State Street; Leonard St. John, M.D., 492 Warren Avenue; Chas. Warrington Earle, M.D., 37 Park Avenue.

The Board of Directors state that this College has been formed in the interest of a higher and more thorough medical education, and that they intend to make its organization, equipment and plans of teaching so excellent and complete in every particular, as to enable it to take rank with the foremost medical schools in this country. The highest practical standard of preliminary acquirement will be fixed and exacted; a pupilage of at least four years, including a graded course of instruction covering at least three full winter sessions, will be compulsory: and the most satisfactory proofs of proficiency in every department of medical knowledge will be required of all candidates for graduation.

Personal.

—The trustees of Dartmouth College have elected Dr. Louis Elsberg, of New York, Professor of Laryngology and Diseases of the Throat in the Dartmouth Medical College, Dr. Elsberg having resigned the professorship he has held here tofore in the medical department of the University of the City of New York.

—Robert Warneck, a veteran of 1812, died in the Soldiers' Home Hospital, at Dayton Ohio, recently, in the 103d year of his age. His age is verified by the record of his enlistment, in 1812.

Items.

—In December number of *Lippincott's Magazine* is an entertaining article by Dr. William Hunt, on "Popular Fallacies about Surgery and Doctors."

—*Cure for Hiccup.*—"Frighten me. What for?" "I've the hiccups. Frighten me and they'll go away." "All right. Lend me five francs?" "Thanks, they're gone. Ta, ta."

—The deaths in Philadelphia for the last week in November were 355, as compared with 327 for the previous week, and 404 for the corresponding week of last year. Apoplexy caused the death of 11, consumption of the lungs 49, and old age 18. This return shows an unfavorable sanitary condition.

—An Evangelical of Hobart, Australia, it is said, refused to permit his child to be vaccinated, because the virus came from a member of the family of a Ritualist. He indignantly declared that his child should not be inoculated with Ritualism. "On the vaccination theory," says the *Independent*, "he did not act wisely. If the child had been inoculated, he could have only a very mild attack of Ritualism, a sort of religious varioloid."

—The Secretary of the California Board of Health writes to Health Commissioner Francis, of St. Louis, that a quarantine has been established on the Central Pacific Railroad, against trains from Chicago. Smallpox has been introduced along that railroad in five counties of California, and in every case, the writer says, the disease can be traced to arrivals from Chicago. It is said that the smallpox is also quite prevalent in St. Louis, "but the authorities are keeping quiet on the subject (in other words, lying about it)."

QUERIES AND REPLIES.

Dr. J. M. W., of Ala.,—The effect of gravity (posture) on parturition has been studied by several writers, especially Aveling. References to it will also be found in various treatises on obstetrics.

Dr. A. O. S., of Pa., asks for the best solvent for glacial carbolic acid—water, alcohol, or glycerine. We find it stated that both the last named are better than water, and are to be preferred. The solubility of pure carbolic acid in water is about one in forty.

Dr. Gonzales asks: "Is it possible for a gastric vertigo to last three months without intermission?"

Ans.—We should think not. Such a vertigo is most likely cerebral or aural.

Mr. Editor.—Your correspondent, H. E. H., of Wis., evidently does not possess the General Index to Ziemssen. On page 2 0 of that index will be found the formula of the meat solution of Leube, referred to. Ziemssen is almost worthless without this index, but with it, it is a mine of wealth waiting for the explorer.

E. J. B.

MARRIAGES.

RAY—KIMBLE.—At Honesdale, Pa., by Rev. Dr. Chas. S. Dunning, Dr. John A. Ray, of Brooklyn, to Carrie A., daughter of John P. Kimble, Esq., Honesdale, Pa.

WILLARD—McCAMANT.—On September 29th, 1881, by the Rev. C. L. Cooder, L. Willard, M.D., of Hatborough, Pa., and Sallie McCamant, of Cains, (Mount Pleasant), Pa.

RIED—MOSER.—On November 7th, 1881, by the Rev. F. P. Bender, at the residence of the bride, Mr. Henry Wm. Ried, M.D., of Manchester, N. J., and Miss Pauline Moser, of Philadelphia, Pa.

ROBERTS—POWELL.—On October 12th, 1881, by the Rev. Thomas A. Robinson, Dr. William H. Roberts, of Chicago, Ills., and Anna M. Powell, of Winnebago, Ills.

SCHRAMM—ORUM.—Before the civil authorities at Aix-la-Chapelle, on September 7th, and in Brussels, on September 8th, 1881, at the Church of the Resurrection, by the chaplain, Rev. J. C. Jenkins, M.A., Dr. Raimond Schramm, formerly of New York only son of Mr. Rudolph Schramm, late Prussian Consul General at Milan, and Mary Barker Orum, only daughter of the late Morris Orum, of Cincinnati. The Hon. James O. Putnam, U.S. Minister Resident at Brussels, gave away the bride.

SEABROOK—NASON.—At Montclair, N. J., on November 2d, 1881, by the Rev. Dr. H. W. Bellows, Harry Seabrook, M.D., and May Nason, daughter of the late Joseph Nason, all of New York. No cards.

SIMON—NORRIS.—At Boonton, N. J., at the residence of the bride's parents, November 9th, 1881, by the Rev. G. H. Whitney, D.D., assisted by the Rev. J. A. Kingsbury, Charles I. Simon, M.D. and Jessie Benton Norris.

STURGE—TURNER.—In Canton, China, August 27th, 1881, by Rev. B. C. Henry, E. A. Sturge, M.D., of Bridgeton, N. J., and Annie E. Turner, of Philadelphia.

DEATH.

THOMSON.—At Mount Savage, Allegany Co., Ind., December 2d, 1881, Alexander Thomson, M.D., aged sixty years and eight months.

Dr. Thomson had practiced thirty-five years at Mount Savage, and won the highest esteem from his many acquaintances and his professional brethren. Resolutions of respect were passed by the Medical Society of Allegany County.

THE

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Original Department.

Communications.

STATISTIC AND OTHER ASPECTS OF WHOOPING COUGH.

BY THOMAS S. SOZINSKEY, M.D., PH.D.,
Of Philadelphia.

Whooping cough is one of the most peculiar and fatal of the diseases which afflict the human race. It is a pestilence which has long been familiar, but about which we are still, in perhaps all vitally important respects, extremely ignorant, almost as ignorant as when Willis drew special attention to it, which was over two hundred years ago. It may safely be affirmed that little is known of its real nature, and quite as little about the way to treat it successfully. There is consequently great room for improvement in our knowledge of it, and the need for such improvement is urgent; for it is a very destructive disease, far more destructive, doubtless, than it is commonly regarded as being. That our knowledge of its nature and treatment will approach perfection in time, may we not hope? Can it be that the cause of it must remain forever a mystery? I believe not. And with the cause thoroughly understood, is it not reasonable to believe that the means of destroying it, and of counteracting its effects on the system may be discovered? Until the cause of it is definitely known, both the prevention and the treatment are likely to continue extremely imperfect. May not some one do for it at least as much as Jenner did for smallpox? Recent experiments of Pasteur and of others afford sufficient ground for entertaining the hope that a safe and effective inoculative method may be discovered for preventing the occurrence of it, and not of it only, but of all other serious zymotic diseases, diseases which rarely affect the same individual more than once.

THE MORTALITY FROM THE DISEASE.

Whooping cough is not directly the cause of many deaths; it is, in fact, the direct cause of very few. In his work on the diseases of children, Vogel remarks: "Death as a direct consequence of an attack is extremely rare. Notwithstanding the numerous epidemics that I have witnessed, I am unable to recall a single instance." Nevertheless, directly or indirectly, it is, as already stated, a far more destructive disease than it is commonly supposed to be. It is, indeed, of a very grave character. Especially is it grave in the cases of very young children; among these it destroys more lives than any other disease of a contagious, or infectious nature. Thus of the 9008 deaths attributed to it in the United States during the census year ending June 1st, 1870, the number of persons under one year of age was 4424, while the number from scarlet fever was 2100, from measles 1861, and from diphtheria 1011. Convulsions, pneumonia, cholera infantum and debility were the only causes to each of which a greater number of deaths was attributed; and it is more than probable that many, very many of the deaths attributed to each of these, and to some others too, were indirectly due to it. Of children in their second year the number of deaths from it was 2086, which was greater than that from any other contagious, or infectious disease, save scarlet fever. More deaths of children under five years were attributed to it than to any other disease except cholera infantum, pneu-

monia, scarlet fever, croup, convulsions, inflammation of the brain, diarrhœa and debility. In Philadelphia there are eleven or twelve causes to each of which more deaths of children under five years of age are attributed than to it, among which are two zymotics, scarlet fever and diphtheria. But if all the deaths which are really due to it were accorded to it, the position in the list would, doubtless, be considerably more in advance. It is stated that in the city of London more deaths of children under five are caused by it than by any other disease, save pneumonia, convulsions and hydrocephalus.

THE AGE AND THE MORTALITY FROM THE DISEASE.

As is very well known, whooping cough is liable to affect persons of all ages, but is most prevalent, by far, among the young. Some children are doubtless more susceptible to the contagion of it than others. Those of about two years of age appear to be the most liable to suffer. It would seem that infants under six months are considerably less liable to be affected than those over that age. The proportion of deaths to the number of cases is far less among adolescents and adults than young children. As stated above, it is particularly fatal in very early life. Of the 9008 deaths referred to it in the United States during the census year, 4424 were of persons under one; 2086 were of persons between one and two; 1063 were of persons between two and three; 529 were of persons between three and four; 294 were of persons between four and five; 468 were of persons between five and ten; 78 were of persons between ten and fifteen; and 65 were of persons over fifteen, including one of a person of unknown age. 47 were of persons over twenty. Of the 1784 deaths attributed to the disease in Philadelphia, from 1860 to 1876 inclusive, 975 were of persons under one; 456 were of persons between one and two; 292 were of persons between two and five; 54 were of persons between ten and fifteen; and 7 were of persons over ten. Only 1 of persons over twenty was reported. According to these figures 54.65 per cent. were of persons under one year; 80.21 per cent. were of persons under two; and 96.58 per cent. were of persons under five years of age. A very small percentage, then, of the deaths are of persons over five years.

The reason why nearly all the deaths from the disease are of young children, is likely due, not to the comparative absence of it in persons over five years, but to the relative inability of the system in extreme youth to withstand the debility and still more serious conditions which it tends to induce. The proportion of cases of it, however, in persons under five, is undoubtedly very great, but just how great I am unable to say.

THE SEX AND THE MORTALITY FROM THE DISEASE.

Sex seems to have considerable to do in causing the deaths from this disease. Far more females than males die from it. Thus, of the deaths in the United States during the census year, 3987 were of males, and 5021 of females—a difference of 1034, or not far from a quarter less of the former than of the latter. Of the 1784 deaths in Philadelphia, 766 were of males, and 1018 of females; or in other words 42 93 per cent. of the former, and 57.07 per cent. of the latter. The proportion here is almost exactly 3 to 4—three deaths of males to four of females. Dr. West gives the proportion in London, as 2 to 3.

Now, it is difficult to account for the greater proportion of deaths of females than of males from the disease. Diphtheria seems to be the only other zymotic to which a considerably greater number of females than of males succumb. It is likely that more females than males contract it, but of this I am unable to speak definitely. Again, it is probable that the female system is less able to resist the disease, being weaker. And again, the disease in the female may, from constitutional peculiarities, be, as a rule, more grave in nature. It is possible, too, that the difference is attributable, in a measure, to the fact that females, even in infancy, are more closely confined to the house, and consequently denied an equal amount of fresh air.

THE SEASONS AND THE MORTALITY FROM THE DISEASE.

All contagious diseases, perhaps, are usually more prevalent in the colder than in the warmer half of the year, just as they are in the higher than in lower latitudes—a circumstance which is doubtless due in the main to the social behavior of people, and not to the effect of cold on the contagion, it, indeed, being more than probable that cold tends to render infectious germs inactive. The disease under consideration apparently does not conform well to this rule; at any rate, it does not conform to it with us as well as it does in England, in which country it is, as Dr. Fox remarks, "usually regarded as a winter and early spring disease." Thus, according to the census statistics, most deaths occur in spring, there being a rise up to the middle of May. From the middle of May the number lessens largely until August, when a rise occurs and continues until October, when a decline sets in and continues until December, when a rise begins and goes on increasing until the middle of May.

In spring there were 3042 deaths; in summer 2377; in autumn 1834; and in winter 1752. (The period at which three deaths happened is not given.) In the various States the death-curve for the year was very similar to that of the United States as a whole; and the same is true of it in the city of Philadelphia. The increased number of deaths late in summer is probably due, in a measure, to the fact that the heat of summer weakens young children, and hence, renders them less able to bear up under the disease. There is reason to believe that in children of a fair degree of strength, the weather of winter and early spring is least favorable to recovery, it being the most likely to induce complications, especially of the lungs. However favorable the meteorological conditions toward the beginning of autumn may be, when the disease occurs in a child spent by the heat of summer, and ailments induced by it, the prospect of recovery is generally bad.

THE DISEASE AND THE OTHER ZYMOTICS.

It is a somewhat common belief that the occurrence of whooping cough is closely connected with the occurrence of some other zymotics and that it is related to them. In treating of the disease in his book on the practice of medicine, Dr. Bristowe disposes of this matter as follows: "Epidemics of it are frequently associated with epidemics of scarlet fever or measles; and it is held by many that there is some kind of mysterious relation or attraction between them."

Now, I do not deem it necessary to enter into any argument to show that the disease is an independent one, for there are sufficient obvious reasons, I believe, to indicate that it is; but it may be well to examine, and see whether or not figures of mortality indicate that it and scarlet fever or measles are apt to prevail extensively, or the reverse, at one time. During the census year the proportion of deaths from scarlet fever, to the population, was particularly high in Pennsylvania, Kansas and Wisconsin, it being 160.4 to every 100,000 of the population in the first, 98.3 in the second, and 96.7 in the third State; and it was particularly low in Georgia, North Carolina, and Alabama, it being 1 to every 100,000 of the population in the first, 1.3 in the second, and 1.3 in the third State. During the same year the number of deaths from whooping cough to 100,000 of the population, was 25.7 in Pennsylvania, 33.5 in Kansas, 20 in Wisconsin, 7.8 in Georgia, 28 in North Carolina, and 13.5 in Alabama. These statistics do not indicate that where there are many deaths from scarlet fever there are many from whooping cough, and *vice versa*. Again, in the census year, the number of deaths from measles to 100,000 of the population was 15.7 in Pennsylvania, 25 in Kansas, 14.4 in Wisconsin, 22.8 in Georgia, 8.1 in North Carolina, and 40.7 in Alabama. It is here seen that there was relatively a very large number of deaths from this disease in Alabama and Georgia, two States in which there was, as indicated above, comparatively very few deaths from whooping cough.

The following table gives the number of deaths in Philadelphia from each of the three diseases in question each year, for the fourteen years ending with 1880:—

Year.	*Whooping Cough.*	*Measles.*	*Scarlet Fever.*
1867	65	83	367
1868	176	108	224
1869	74	85	799
1870	105	48	956
1871	81	43	262
1872	163	143	174
1873	97	30	319
1874	74	117	354
1875	125	12	1032
1876	88	53	328
1877	81	69	379
1878	109	12	554
1879	103	8	336
1880	101	108	291

These statistics also, do not seem to show any correspondence between whooping cough and either measles or scarlet fever. Thus in 1879 there were 103 deaths from whooping cough, while there were 8 from measles, and in 1874 there were 117 deaths from measles, while there were 74 from whooping cough. Here it would seem that as the prevalence of measles lessened, that of whooping cough increased, and *vice versa*. In 1875 there was a heavy mortality from whooping cough, while that from measles was light. In 1872 and 1874, years in which the mortality from measles was very heavy, that from whooping cough was above the average in only the former. Again in 1871 there were 81 deaths from whooping cough, while there were 262 from scarlet fever; and in 1872 there were 174 deaths from scarlet fever, while there were 163 from whooping cough. Here, too, it would seem that in years in which the prevalence of scarlet fever lessened, that of whooping cough increased, and *vice versa*. In 1868 there was a heavy mortality from whooping cough, while there was a very light mortality from scarlet fever. In 1870 and 1875, years in which the mortality from scarlet fever was very heavy, the mortality from whooping cough was above the average in only the latter.

Although the view of Sydenham and his disciples, that "the constitution of the year * * * tends to produce some particular epidemic disease, and likewise to reduce all the cotemporary diseases to its own form and likeness," may be far from being entirely erroneous, it is reasonable and proper to hold that meteorological conditions influence the prevalence of scarlet fever, measles and whooping cough to a great extent similarly. This would appear to be the only weighty reason for expecting these diseases to prevail extensively, or the reverse, at one time. But meteorological conditions are not the only influences at play in determining the degree of prevalence of any contagious disease.

THE CYCLICAL NATURE OF THE DISEASE.

As is well-known, whooping cough prevails to a much greater degree some years than others. This being so, the question arises, Do the severe outbreaks of it recur periodically, or in cycles of years? I do not recall that any law of this kind has been pointed out. An examination of the mortality statistics at hand does not apparently show that there is any such. In Philadelphia there was a largely increased number of deaths every other year between 1867 and 1872, but a regular biennial excess is not observable in succeeding years. This will be apparent from the following list of the deaths yearly in Philadelphia, for the fourteen years beginning with 1867: 65; 176; 74; 105; 81; 163; 97; 74; 125; 88; 81; 109; 103; 101. As will be observed, when the number of deaths in any year is considerably above one hundred and three or the yearly average, there is generally a considerably smaller number of deaths the succeeding year, and *vice versa*.

It would appear, then, that if the disease prevails extensively one year, it may reasonably be expected that the following year it will prevail to a much less degree, and *vice versa*. The explanation of this peculiar feature of the disease may be found, I believe, in the condition of the population as regards liability to contract it. Until a year after an extensive outbreak, there are comparatively few children who are particularly susceptible to the contagion of it; and the year following one in which it has not prevailed extensively, there are many children who are particularly susceptible to the contagion of it.

REMARKS ON THE PREVENTION OF THE DISEASE.

It is the general belief of scientific physicians, that whooping cough is a disease that is always due to a specific contagion. A child never contracts it otherwise than through infection with exhalations from a person suffering from it. The contagion floats readily in the air, and may be carried from point to point in clothing, and the like. The truth of all this can hardly be questioned.

Now, as every physician knows, the disease begins with febrile and catarrhal symptoms, which usually abate within two weeks, to be followed by others which may last for months, and of which a distressingly severe cough is the most evident. This being so, the question now arises, Is the contagion thrown off only during the first stage, or during both? It is strange that a point so important as this is not even referred to in most of the books on the practice of medicine and on hygiene. The opinion which there is ample reason for entertaining is, that the contagion is given off throughout the entire course of the disease, but more freely at first than later. In respect to this matter, Dr. West, in his lectures on the diseases of children, says: "So long as a child who has suffered from whooping cough continues to cough at all, even though only once or twice a day, I should be unwilling to restore him to the society of children who have not already had the disease." Every practitioner of experience can, probably, recall cases which arose from contagion given off by children in whom the disease was declining. Dr. Blyth, an English sanitarian, in his dictionary of hygiene and public health, makes these suggestive statements in respect to an epidemic of the disease in a workhouse which he was called on to investigate: "A woman tramping the country came into the house with a child, the latter suffering with whooping cough. Both mother and child were separated for a long time from the rest, until one day some charitable person gave a treat to the inmates, and this child and mother partook of tea at the common table in an open field, the child being on the lap of its mother. In about a week seven children who were seated at the same table, but not in contact with the child or mother, all simultaneously, or nearly so, became affected with whooping cough."

Early in the autumn of the present year a friend of the writer lost a beloved and only child from the disease, which was contracted at a family gathering, in a village of New Jersey, at which were two affected children from this city, taken there, too, with the consent of the doctor in attendance on them. At least eight of those present got it, but how many of them, or of others who got it from them, died, I do not know.

I have thought it well to dwell at some length on the fact that the disease may be communi-

cated at any of its stages, for it is one, the import of which is not duly appreciated by many parents, and not a few persons who are practicing medicine. I have not the slightest doubt but that a very large percentage of the deaths from the disease in summer and autumn, and indeed, in all the seasons, may be traced to the criminal, or what should be regarded as the criminal conduct of parents in taking their affected children, or allowing them to go where there are children liable to contract it. The school-room is a fertile source of it; and the origin of doubtless very many cases may be traced to such places as the pleasure steamboats which are found on the rivers near all large cities during the warmer half of the year, and on board of which there are often large numbers of feeble young children. Parents who are guilty of the conduct referred to, and their medical advisers too, should be dealt with severely, by law.

For several purposes, but particularly by way of duly emphasizing the wrong of aiding the propagation of the disease through having those affected with it in places where there are persons liable to contract it, and especially young children, I will append the following letter, which is a copy of one sent to the editor of a daily newspaper, for insertion in its correspondence columns, but which he, not deeming it wise to bring the information it contains to the attention of the public, or for some other reason, consigned, so far as I know, to the waste basket:—

Dear Sir:—The practice of taking young children on frequent trips on the Schuylkill and the Delaware steamboats during the summer months, is highly commendable; it is a sanative measure of great value. But, of course, the advantages of it may be marred by making the trips very long, by failure to provide proper nourishment, and other circumstances. But I do not desire to discuss it at length. My object in writing is to call attention to the fact that it is favorable to the spread of at least one very serious contagious disease—whooping cough. I was made acutely alive to this danger yesterday afternoon. While on one of the steamboats on the Schuylkill, I discovered that my child was surrounded by a family of four who were suffering from the disease in question. In my opinion the lives of the scores of babies on that steamb at were exposed to a grave risk. There is no other disease, except, perhaps, smallpox, which is so communicable as whooping cough, and among very young children it is, as statistics show, the most destructive of all contagious or infectious diseases. Now, I would say that any mother who takes her child who is suffering from this disease aboard a steamboat crowded with young children, is guilty of a serious crime. If she desires to take it out, she should take it where she will not likely be the means of bringing disease and death to the homes of others.

Yours respectfully, T. S. S.

As may be gathered from what precedes, isolation is the chief measure for the prevention of whooping cough. A child who has contracted it should be kept apart completely from at least those who have never had it. It is, perhaps, out of the question to suggest that this should be undertaken by public health authorities; the patients being, as a rule, mere infants, it probably must be left in the hands of parents and guardians. Such isolation might, I think, be enjoined by law, to good purpose. Taking no precaution to prevent others from getting a serious disease like this, is entirely wrong; and allowing every one to carry it from house to house with impunity is a murderous policy.

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THE PREDISPOSITION TO TUBERCULAR DISEASE, AND THE IMPORTANCE OF STUDYING THOSE SIGNS THAT POINT TO ITS EARLY RECOGNITION, THAT PROPER TREATMENT MAY BE INSTITUTED AS ITS PROPHYLAXIS.

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It has frequently occurred to me that we are not taught with sufficient emphasis the very great importance of studying the *longevity* of disease—if I may use the expression—as a basis for *prognosis*, and also its bearing upon the early indications that show the hereditary tendency to certain affections, or those that point to an early acquired taint that may later develop disease, upon provocation. If visited by a case of phthisis, the question asked by the patient is not always, "Have I consumption?" "Can you cure me?" for your patient frequently knows, as well as yourself, that the balance is leaning against him; it is not the physician who will cure him that he seeks, but rather him that can prolong his life a week, or a month, or probably a year. He will ask, "what are my chances, judging from the progress this disease is making, for a prolongation of my life; what is the average length of time this disease lasts, and how am I to live in order to give myself the greatest possible chance?"

We endeavor to define a disease in its earlier stage, because we are then better able to check its course; should it progress, we can convince ourselves that its course has been rapid or slow; has been controlled or not, by our treatment;

that the future, if unaffected by treatment, will be proportionate, in its rapidity, to that with which it has already advanced. Prognosis is frequently as important as diagnosis, for while the latter detects a disease and limits it to an organ, or a system, accurately determines the degree of the deviation from health, the former takes a disease so defined, fits it to the individual, with his peculiarities and tendencies, foretells its future, and frequently anticipates, by proper treatment, its threatened dangers. In this, medicine has its true claim as a science ; in *treatment* it can scarcely ever rise above an art.

Is this departing from my subject? I think not, for, if we study disease, we have to follow it on either of its roads, that towards recovery or that towards death, the one as important to us as the other ; and if it is necessary for us to detect disease in order to treat it, it is equally necessary for us to foretell its course, that we may check it by timely means ; or to go back still further, study its history, that we may prevent it.

Prevention, *diagnosis*, and *prognosis* are a trio inseparable ; to the first I will at present call attention, limiting myself to the study of tubercular disease. How frequently we hear this expression used relative to a young man choosing a profession, "he cannot be a lawyer or a doctor, because he has a tendency to consumption," or "an indoor or sedentary occupation would be harmful to him, as his lungs are delicate." The person in question may be sound at the time, with good organs, working physiologically ; what is this *something* by which that tendency to disease is known to exist? People recognize this predisposition, and not only do they believe that a peculiar appearance, a combination of conditions which we analyze and group according to their importance, predicate a tendency to disease, but they also know that proper caution may eventually eradicate such a taint. The statement is made, by no less an authority than Jaccoud, in his late work on the "Curability of Phthisis," that even this dreaded disease, at certain stages in its course, halts for a time, and by proper treatment can then be held in abeyance, or even absolutely cured ; that, in fact, whether it be of a true tubercular variety (chronic), or of simple catarrhal nature, its tendency is that of all disease, towards cure, provided the patient's condition and his surroundings are such as will give it an impetus in that direction. He tells us that the tendency to undergo caseous degeneration, or the softening of a tubercular nodule, is counterbalanced by an endeavor to convert it into a fibroid mass by the formation of an exterior coating of dense connective tissue ; that the tendency of cavities is as much to contract by cicatricial tissue as to continue to erode the coverings of their blood channels ; in other words, that by studying the details of an ever careful treatment, by anticipating events, as it were, even the advanced cases of this disease can be held in abeyance, and its course often completely checked. If this disease can be so controlled, as this great authority tells us—and he knows no peer—the importance of attention to those who are strongly *predisposed* and not yet affected increases in value, and the question arises, whether or not all cases of phthisis, by proper care, could be avoided.

It is necessary for us to analyze with care those conditions which, as a whole, exhibit to us that picture called predisposition. Jaccoud, in the work just referred to, gives it to us, and we may include his summary in the following :—

The first and most important study is hereditary influence ; it can be either *direct* or *collateral*. This in itself is sufficient as an indication for treatment, and especially is it important when other children in the same generation have died with the taint. Hereditation means the transmission of the tendency which may proceed from a grandparent or from that generation (atavism), or from the parent. The following has a direct bearing upon it : the age of the parents at the time of marriage, the two extremes of life affecting the offspring ; the health of the parent at the time of marriage.

This latter is most important, and is apt to be lost sight of as time goes by, especially, if from change of occupation, or of habits, or of climate, the delicate one has improved after the taint has been transmitted. Should one or both parents be diseased at the time of the conception, the imprint will be left upon the offspring ; alcoholism, syphilis, scrofula, diabetes mellitus, epilepsy, or phthisis itself must be inquired for. A *liability* from inheritance, or that acquired, which at the time may affect the parent or parents, and be then tided over by care or treatment, so that eventually death would come from some other cause, might be inherited by the child. Marriages of consanguinity come under this head, and they are to be especially taken note of when a family predisposition is intensified, or a combination of two takes place, as epilepsy and scrofula, or phthisis and alcoholism.

Constitutional debility, innate or acquired, is the next important matter for consideration. Physical work greater than the age of the individual would permit of ; sedentary occupation ;

close confinement of young children in overheated, badly ventilated houses (even nurseries); too much desk work; dark dwellings; insufficient food, exposure, neglected catarrh; then, again, women who have borne children too rapidly, nursed them too long; or persons given to venereal or other excesses—all such, and many more that could be mentioned, are predisposing causes of the development of tubercular disease.

Scrofula is an indication of the first order; if it is in activity at the time a child reaches the age when pulmonary affections develop, treatment would be most urgent. If the scrofulous condition has been cured before this age, it would be more favorable to the child, but the manner of cure must be taken into consideration, and also the degree. Very often glandular enlargements or tumors are left, which may take on caseous degeneration, and through them auto-infection, by means of the lymphatic vessels and veins, may take place. Jaccoud calls our attention to Ponfick's researches, in which the lining of the thoracic duct was found affected by a tuberculous eruption from the introduction of lymph from a case with general tuberculosis. He also quotes Tuckwell, Mazzotti, Duckworth and Gee, in connection with this subject of auto-infection from tuberculous glands.

Previous pleurisy is another predisposing cause; this, with adhesions, may remain a long time latent, but may form a focus for caseous degenerations. Professor J. Lewis Smith has shown us how frequently pleurisy (often undetected) exists in even young children. Measles, whooping cough, typhoid fever, and diphtheria, give rise to a simple broncho-pneumonia, which may become subacute or chronic, and then becomes alarming in cases when the predisposition exists, and its treatment must be timely and energetic.

We are told that hæmoptysis, though rarely, is at times a cause of pulmonary disease, and that it may be a primary one.

Tubercular disease may be transmitted by contagion.

Villemain and Chauvrau have shown that the injections of sputa of phthisical cases may, as well as inoculations, give rise to tubercular disease; and Klebs has shown that it can be transmitted by the milk of tuberculous cows, first giving rise to gastro-intestinal catarrh, then disease of the mesenteric glands, the liver and spleen, and finally to tuberculous lungs; but that vigorous constitutions will prevent this resulting in death, and cure will finally take place, by cicatrization of the nodules. Experiments were made by Tappeiner, in 1877, with sputum prepared in emulsion and inhaled by feeble dogs for an hour, or an hour and a half daily. This was mixed with carmine, and the latter was found in numerous spots on the surface of both lungs. These were followed by conclusive proof.

Constitutional debility is the basis for the development of contracted tubercular disease; wives catch it from their husbands, it is said, more frequently than the latter from their wives, on account of the debility which attends gestation, etc. A well-known example of contagion was reported by Flint, in 1875. A workman and his wife and five children, four boys from three and a half to fourteen years and a girl of fifteen, came to live in a village in Denmark, taking a small room where there had already lived a man and wife with a grown son affected with phthisis. This was in the fall of 1872, and they remained in this air till the first of the year 1873; but by Christmas, 1872, all five children, none of whom were previously scrofulous or diseased, were taken with phthisis; the length of the disease being seven weeks; three months; three and one-half months; six, and seven months; and the girl, who lived but one day in the room, died in three and one-half months.

The following, reported by Reich in 1878, is equally conclusive evidence of contagion. At Neuenberg, a village of thirteen hundred inhabitants, two midwives had about an equal share of obstetrical practice. One became phthisical in the winter of 1874, and she died in 1876. Of the children at whose birth she presided from April 4th, 1875, to May 10th, 1876, ten died (from the 1st of July, 1875, to the 29th of September, 1876) of tubercular meningitis. None of these children had hereditary taints. In the practice of the other, no child died of this disease. It was found that the former was in the habit of practicing direct insufflation when the children seemed partially asphyxiated. The disease was not endemic at that place, for out of ninety two deaths of children under one year, from 1866 to 1874, but two died of this disease; and in 1877, of ten deaths, but one died of this disease, and that child came of tubercular parentage.

Semmers experimented, in 1875, by injecting blood from a tuberculous cow, and out of nineteen eleven were positive. I quote these examples to show that disease of this kind can be acquired, but there must be a *receptivity*, as Jaccoud terms it, either through an inherited predisposition on the part of the individual exposed or one acquired. To day, it is acknowledged that tubercular disease can be communicated by inoculation, by inhalation of air more

or less charged with materials exhaled by patients, or possibly by materials given off by the skin and communicated by sleeping in the same bed with diseased cases. Some believe that it is specific from germs which are communicable; others that it can arise *de novo* as a simple product of tissue change, and can then be carried as a focus for communicating the disease. It can also be communicated by milk from tuberculous cows.

What are the characteristics of the soil which vivifies such seeds; in other words, what are the individual peculiarities which even the laity recognize as fertile for the development of tubercle?

A long body, a thin neck, with prominent, ribbon-like muscles, long hair, of luxurious growth, bright, animated, blue eyes, with long, dark lashes, beautiful teeth, the skin clear and transparent, showing the blue lines of the veins, bluish finger ends, with clubbed nails, a nervous, excitable temperament; these, when combined, form a striking picture of this tendency, and often when seen separately are easily recognized. Such cases catch cold easily, though they, as a rule, recover rapidly. They easily weaken or droop in overheated rooms, readily fatigue after excitement, and often complain of short breath after animated conversation, or upon any extra exertion. The tone of the voice easily alters. Any one of these signs well marked, or a combination of them in cases with inheritance, with anæmia, with dyspepsia, menstrual disorders, or unaccountable sudden alterations in the voice, vague, flying (rheumatoid) chest pains, or a genuine attack of rheumatism, with the "pterygoid" thorax, and unaccountable emaciation, make up the portrait which forms the verdict of weak lungs. There is another variety which frequently deserves attention and requires great care in preventive treatment, that which is distinguished by what we term the scrofulous diathesis; skin which is opaque and "doughy," thick lips, large, gray eyes, sandy hair, and a tendency to glandular enlargements, especially those of the neck and the tonsils.

Let us go further back, and study the infant in its cradle. What are those indications that point in its case to the development of tubercular disease? Many of the above mentioned grosser signs are wanting in one so young, but we have others to take their place. In it the type of disease is usually acute; it is not invariably confined to one system of organs; instead of an insidious inflammatory disturbance within its lungs, of a chronic form, its tubercular deposits occurring upon the cerebral membranes, or within the abdominal glands, will not tarry long to provoke marked symptoms. We will have the history of diathetic taints to guide—as hereditary predisposition, or that acquired by faulty nursing, or faulty bottle feeding, or vitiated atmosphere; or again, defective vitality, probably, from too early birth, or bad management at the outset of its career. How often we hear it said, "no wonder she died of consumption; she never was strong; she was an eight months' child;" or, again, "his weakness was due to the fact that his mother (poor thing), nursed the other child too long while she was carrying him." Indeed, the last child of a couple now well advanced in years, who have raised a good family, will frequently prove a fertile soil for the development of a disease that the others have baffled. Those babes conceived in the hovels of the poor, and nurtured in the dark and damp alleys of a large city or in the crowded quarters of a tenement house, are certainly prone to such an enemy, but scarcely more than those of wealth, who have fed from silver spoons, upon unnutritious diet—bottle-fed, to keep their mothers fashionable, or nursed in overheated rooms, for fear of nature's pure, fresh, invigorating air. These are most frequent causes of early developed tubercular disease.

The infant with a large head, a patulous fontanelle, with beaded ribs or enlarged joints, with feeble digestive power, a tendency toward constipation at times, and then, without cause, an irritable diarrhœa, a large belly, is a fit subject for such disease. Another noticeable fact is that such infants occasionally show not only want of assimilation of food, witnessed by the poor nutrition, but at times a want of function in the intestinal glands and those of the stomach; and they frequently pass their milk scarcely altered, except to curdle. Infants of this class early show a great predisposition to catarrhs, to glandular swellings, and also to obstinate eruptions. Their sleep may be disturbed by frequent terrors, or they will toss the head, restlessly, from side to side, turn the eyes up, at times, and will, without cause, at times, break forth in profuse perspiration about the head, alternating with cold extremities.

It is most usually the bright and precocious babe, whose brain has progressed more rapidly than its body in size and development, that succumbs earliest to this dreaded affection. It is that part of the body which receives most blood, that part where tissue change is most

rapid, in which the disease takes its seat; consequently tubercular meningitis in the infant occupies the place that does chronic pulmonary phthisis in the adult. Then, again, we have the infant with a scrofulous diathesis—not as the one first described—with those characteristics that are termed "rickety;"—the one which is large and unwieldy, which is slow of development and somewhat sluggish in intellect, with nasal catarrh or squamous eruptions, with a tendency to croup and bronchitis, with glands which, upon the least provocation, will suppurate, and always remain large enough to be distinctly seen or felt; here a more chronic form of tubercle may be developed, occupying deeper tissue, forms in nodules, enlarges and softens the mesenteric glands, and forms a conglomerate mass, which excites the interest of pathologists, and raises questions as to its specific nature.

From this hasty glance at a subject so important, we see that the healthy possess in themselves powers of resistance to infection of this disease or to the development of the disease from tissue change. The treatment by *prevention* should then be directed to the establishment of this healthy state. Our cases cannot always be guarded against receiving infectious matters, but we can establish that *resistance* which is brought about by health, which in itself will counteract the *receptivity*, inherited or acquired.

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

CLINIC OF JOHN ASHHURST, Jr., M.D.,
Professor of Clinical Surgery in the University of Pennsylvania.

Reported by Charles S. Dolley, for the Med. and Surg. Reporter.

Recurrent Calculus.

Case 1.—Our first case to-day, gentlemen, is a rather complicated one; this boy, seven or eight years old, was some time since operated upon for stone in the bladder. The wound has either not healed, or having healed, has reopened and is discharging. Before introducing the sound I wish you to notice the great elongation of the prepuce, so characteristic in these cases, brought about by the habit of dragging at the part; the sharp pain in the glans penis being especially marked in children. Recurrent stone, while rare, does sometimes occur, and may be owing to the persistence of the causes which gave rise to the existence of the first stone, or again to the first stone having been broken in the attempt to remove it, one or more fragments remaining in the bladder. This may have been the case here—as seems probable from the character of the grating sound which I find at the perineal opening on the introduction of the sound. The operation under these circumstances will, of course, be a complicated one, from the previous wound making the perineum more dense, and thus, in the first place, increasing the difficulty of feeling the stone with the sound or staff; and in the second place requiring the wound to be made through cicatricial tissue; we may, besides, find cystitis as another complication during the after treatment. The operation which I shall perform, after having made a careful examination, and having satisfied myself as to the presence of a calculus, will be the ordinary *left lateral lithotomy.*

If we have a very small stone to remove, we may employ the median operation, or better still, we may remove it by crushing; the latter method being more favorable in adults than in children. If the stone, on the other hand, is very large, we may resort to bilateral lithotomy, in which we make a wound in both the right and left perineum, and gain room by incisions of the right and left side of the prostate. In case this does not give us sufficient room, we may either crush the stone, or as a last resort, perform either the *recto-vesical* or the *high operation.*

It is not often that we are compelled to resort to the latter, and I have removed in this amphitheatre a stone weighing more than three ounces by the ordinary *lateral operation.* I think it best always to secure the patient in the "lithotomy position," by fastening together the hands and feet with bandages; this was the method employed before the discovery of ether, but I think it a safe precaution under any circumstances. It is of advantage to inject a few ounces of tepid water into the bladder, as it keeps the posterior surface of the bladder out of the way of the wound, and on making the incision the gush of water carries the stone against the neck of the bladder, rendering it less difficult to get at. The staff employed should be as large as can be introduced with safety, and should be held by the assistant firmly against the pubic arch. After the operation make sure that no portion of stone has been left, by introducing the finger and feeling carefully along the wound and in the neck of the bladder, and by washing out the organ with a stream of tepid water. Do not be in a hurry in a case of stone; take plenty of time. The after treatment is simple; keep the legs together, the parts dry and clean; an opium suppository if necessary; perfect rest, with a milk diet; and after the urine ceases to flow through the incision, treat as you would any other incised wound.

Amputation of Leg.

Case 2.—Some of you will probably remember our next patient, who appeared before us last winter with a bad compound fracture of the leg. Amputation was advised at the time, but as he protested so strongly, an attempt was made to save the limb. The external wound healed almost entirely, but in the course of the summer ulceration of the cicatrix has occurred, accompanied by consecutive shortening, and he now comes to us to have the limb amputated, as he feels that it is a burden. This is an instructive case, in showing what nature can accomplish, and that a limb may be saved even when the sloughing is very great. By all the rules of surgery, it should

have been amputated; but it is not best to insist too strongly when the patient refuses, lest you receive blame as long as the patient lives, for an unnecessary amputation. Another point to be remembered in favor of an immediate amputation is, that an ulcer from an old injury is apt, in the course of years, to take on a malignant form, such as we often see on the lip and tongue, due to irritation; thus, what begins as a simple ulcer, becomes, in the course of time, an epithelioma, by the excessive product of epithelial cells on the surface of the ulcer boring their way into the tissue in peg like masses.

Always apply the pad of the tourniquet either directly over the artery, or directly opposite; in the first case it acts by pushing, in the latter by pulling; if it is applied in any other position, you will get a sliding pressure. It is important that you should remember to thoroughly shave the leg before amputation, in order to avoid much of the severe pain caused by the removal of the adhesive strips from the stumps.

Cystic Tumor.

Case 3.—We have, in this case, an example of the difficulty of diagnosing between a fatty tumor and a cyst, especially if the latter be thick-walled and deeply-seated. The diagnosis is much influenced by the position in which the growth is found; thus, in those parts of the body in which fat is most developed, we may expect to find fatty tumors. Cysts may occur in any region of the body, often originating from distention of ducts or sacs; they are very common in the scalp, which is the favorite seat of sebaceous cysts. Fatty tumors may, however, occur in the scalp, and I have known them to be mistaken for cysts. In the present case, the growth, which you see is as large as a female breast, being situated deep beneath the muscles of the side, and rather doughy than fluctuating, presents many points of resemblance to a mass of fat.

In the removal of non-malignant growths, it is best to avoid the removal of any skin, and a curved, or S-shaped incision should be made, in order to expose the growth well, without at the same time making a very large wound. In malignant growths adherent portions of skin should be sacrificed, since, if allowed to remain, they but encourage a return of the growth.

The most difficult part of the operation is the removal of the cyst walls, which are often, as in this case, very thick, and have to be carefully dissected out.

At times, cysts may cause absorption of neighboring bone tissue, from pressure; this is often the case with the congenital cysts of the head, where they cause thinning of the skull at the point of pressure, sometimes leading to the most serious results. The present growth, which seems to be one of long standing, has sent processes between the ribs, which processes we will not dissect out, for fear of perforating the thoracic cavity, but will wash the floor of the wound with a solution of chloride of zinc, which will cause the sloughing out of any portions of the cyst wall that may remain, and give us a healthy granulating surface.

The French have a method of diagnosing fatty tumors by means of the ether spray; the intense cold produced by the application of this to the growth will, if it be a fatty tumor, cause its septa to contract, and thus increase its characteristic lobulated appearance.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

BY PROF. FRANCIS DELAFIELD.

Parenchymatous Nephritis.

Case 1.—This little girl, gentlemen, is ten years old. Her mother noticed two years ago that she was passing hardly any urine, and after this had lasted for a few days, the child had general dropsy. She had been well previous to the time she began to pass less water than normal, and when the dropsy became developed, she manifested no further symptoms, save that her face was lemon yellow in color. The dropsy continued for about four weeks, and the child apparently returned to health. Her mother found that the urine still contained albumen, however, although the child was otherwise apparently well. Her apparently good condition continued until about a year ago, and then the patient's urine was normal. Last spring, however, the dropsy returned, with albumen in the urine. The dropsy continued till about four weeks ago, when it disappeared; the child presents no sign of it now. Albumen is present in considerable quantity. The specific gravity of the urine has ranged from 1.010 to 1.015, and casts of all kind are found in it, also a few blood-globules.

At present the child does not look sick. Her color is good, her lips are red, and her whole appearance is very fair.

Of course you decide that she has Bright's disease; but that is not enough. We want to know what the exact lesion is, in order to know the treatment and the prognosis. She is suffering from parenchymatous nephritis, and we would call it acute parenchymatous nephritis, in spite of the length of time it has existed.

The mother tells us that the patient has suffered from two attacks. If this be true, the prognosis is tolerably good; the probability of the child's recovery is very fair. How soon she will recover we do not know. If we could see that the child passes the next winter in a warm climate, the prognosis would be much better. If she can go through next winter and spring without another attack during that time, her chances are good, but if she has another attack during the winter or spring, the prognosis will be more unfavorable.

The dropsy in this case being absent, furnishes no indication for treatment. Albumen is still present in the urine. The patient's blood is apparently in good condition; her color is good, and her lips are red. But in spite of this evidence she may be anæmic. You will find it a good plan in these children, to listen to the first sound of the heart, and you will get a blood murmur in these children. The patient has such a murmur and her blood, then, is not in as good condition as it appears to be; she is really anæmic. Hence, in this patient, we treat the blood and the disordered function of the kidneys.

In many of these cases we give iron for the

anæmia; but in this case I should be disposed to give small doses of the bichloride of mercury. That drug, given in small doses for a considerable length of time, seems to increase the number of the red globules of the blood. Give the bichloride to this patient in doses of one-thirtieth of a grain, three times a day.

The child's skin should be kept in the best possible condition. She should be washed all over every night, so that the skin may be kept absolutely clean, and she should be clothed completely in flannel.

The issue of this case will depend very much upon whether she has an attack during the course of the winter and spring.

Chronic Meningitis.

CASE 2.—The patient suffered from sunstroke last July. He did not lose consciousness at the time. He lost the power of his legs and the power of speech. He has been confined to the house until recently, and during that period the loss of muscular power and the loss of power to speak continued. He has lost his memory, and his whole mental condition is bad. He speaks with difficulty now; and his legs show considerable muscular weakness. There is also some loss of sensation. The patient tells us that he was not well previous to the sunstroke; that he had a dull, drowsy feeling all the time, and that headache existed also, before last July.

This history is not the regular history of sunstroke. Sunstroke is common enough in New York, but we do not get such a history as this very often from it. The patients will suffer from impairment of memory and headache, and they will not feel well generally. But we do not get loss of power of speech, and of the voluntary muscles, as in this man. With the present history, I would not be willing to say the loss of speech and muscular power, are due to sunstroke.

The history which the patient gives is that of chronic meningitis. With that disease we get just such a history as this. The patient says that he has never had syphilis, a common enough cause of chronic meningitis. If he has had chronic meningitis, he is better now. The disease may improve further. Although the condition of his legs and of his speech may get better, it is probable that his mental faculties will be affected for some time.

Observe the character of the difficulty in his speech. The patient has been completely aphasic, he is partly so now. The aphasia is due, in this case, to impairment of the power of the muscles of articulation. This form of aphasia is not very uncommon with chronic meningitis. With apoplexy and cerebral embolism we are more apt to get that form of aphasia due to loss of the faculty of speech.

This patient must take iodide of potassium, and continue the drug for a long time. Give doses of from ten to fifteen grains three times a day. He should get out of doors as much as possible for fresh air and exercise.

Acute Diffuse Nephritis.

CASE 3.—This patient says that she was in apparently good health until last February, when she was confined. The confinement was perfectly normal. After it she was well enough until March, when, after going to bed one night in good health, she awoke in the morning with a febrile movement, headache and vomiting. Her urine was high colored. She was sick in bed for a month. During the time there was no dropsy. At the end of the month her general constitutional symptoms had disappeared, but when she began to go about the house, her legs became œdematous, the œdema extending up to the thighs. The swelling lasted till July and then disappeared, save that now, after standing for a long time, there is a little swelling of the legs. She has occasional headaches, but no sickness at the stomach. She is anæmic. Her urine contains a considerable amount of albumen; its specific gravity is 1.008.

We want to know, for the sake of the prognosis and treatment, what form of Bright's disease this patient is suffering from. The disease commenced abruptly. In a certain number of cases of diffuse nephritis, the first symptoms come on abruptly; but we do not get the febrile movement so abruptly. The febrile movement comes on during the exacerbations of the disease, but we do not get it at the outset. Another obscure point is the abrupt commencement of the nephritis, as such. For this woman to go through a confinement, without showing the signs of nephritis would be very uncommon. If she did this, it is more likely that the case was one of acute diffuse nephritis at the beginning. The question now is, whether it was acute diffuse nephritis at the outset, and has now become chronic diffuse nephritis, or whether the acute diffuse nephritis has nearly run its course. If the latter be the case, the prognosis is favorable, but if she has chronic diffuse nephritis now, or has had it from the first, then the prognosis is very bad. The history of the case will not permit us to be certain as regards the decision of this point. The probability is that she has had acute diffuse nephritis.

The dropsy in this case also requires no attention. The condition of the blood and the disordered function of the kidney require treatment. The anæmia is more marked in this patient than it was in the little girl. Oxygen gas and iron, combined, will most promptly relieve the anæmia. We prescribe inhalations of oxygen gas, and some preparation of iron to be taken by the mouth. This is all that need now be done for this case.

WESTERN PENNSYLVANIA HOSPITAL, PITTSBURG, PA.

Reported for the MED. AND SURG. REPORTER, by JOHN J. BUCHANAN, M.D. (Resident).

Amputation of both Legs and Fracture of the Femur—Recovery.

Henry N., a brakeman on the Penna. R.R., aged twenty-one, was admitted to this house at 12.30 P.M., August 3d. Twenty minutes previous to admission he had been struck by a moving car and had fallen betwen the rails, the car passing over him and the wheels comminuting the bones of his left leg and right ankle and pulpifying the surrounding soft parts. Besides these injuries, he had sustained a fracture of the left

thigh-bone in its upper third, and wounds of the face and scalp.

Twenty-five minutes after admission the patient was anæsthetized with a mixture of equal parts of ether, chloroform and alcohol. James McCann, M.D. and W. R. Hamilton, M.D., Surgeons to the Penna. R.R., then amputated, the former the right and the latter the left leg. The Esmarch bandage was used in both instances. Anterior skin and posterior musculo-tegumentary flaps were formed and section of the bones of the left leg made in the middle third and of the right at the junction of the middle and lower thirds. The arteries were secured by torsion and the oozing checked by the application of towels wrung out of water as hot as could be borne by the hand. The edges of the flaps were accurately apposed by silver wire sutures and adhesive strips. No drainage tubes were used. The dressing was resin cerate and absorbent cotton. The patient was put to bed and the fractured thigh steadied by lateral sand bags, no extension being at first attempted.

During the first three days the pulse was full and regular, and remained between 108 and 114 per minute. The temperature ranged between 99.5° and 101.6°. Liquid diet was used exclusively, for which the patient's appetite was fair. One-sixth grain morphiæ sulphas was given hypodermically each evening, which secured sound sleep throughout the night. But little pain was experienced. At the end of the third day the dressings were for the first time removed, and both stumps were found in excellent condition. There was considerable suppuration, but no sloughing. Gentle pressure was used to promote the escape of pus, but neither then, nor at any subsequent dressing was any water applied. The fractured thigh was supported by a leather splint and a firm roller.

From this time the patient's stumps steadily healed. They were dressed daily with the resin cerate, and union by primary adhesion was gained in a large part of the extent of the suture of both limbs. The rapidity of the pulse gradually lessened, and the temperature declined till it became normal on the seventh day. On the sixth day the diet was increased by the addition of toast and steak. The patient's appetite continued good, and his spirits and confidence in his recovery never flagged. On the twenty-sixth day the injured thigh was incased in a plaster-of-Paris dressing. On the twenty-eighth day both stumps were entirely healed. At the end of the seventh week the dressing was removed from the thigh, and the fracture of the former found firmly united, with but little shortening.

The points thought worthy of remark in this case are the slight amount of constitutional disturbance following such grave injuries, and the steady and rapid healing of both stumps.

The promptness with which the operations were done (three-quarters of an hour after the injury), the excellent constitution of the patient, and the fact that the dressings were untouched for three days, are considered the important factors in the favorable result.

Editorial Department.

Periscope.

The Prevention of Ophthalmia Neonatorum.

Dr. K. Grossman has, in the *British Medical Journal*, the following valuable suggestions:—

The idea of preventing this disease by prophylactic measures has been crowned, as far as known till now, by a splendid success. In order to seize the evil at its root, Crédé, in Leipzig, carefully treated the least trace of vaginal catarrh of the pregnant woman, so that at the time of the confinement the fluor had quite vanished. He had some success: but in a comparatively great percentage the outbreak of ophthalmia could not be prevented. The local treatment of the maternal passages, however valuable, did not prove sufficient; and this result led to the experiment of disinfecting the eyes of all new-born children, without exception, as soon after birth as possible. In some cases, where a fluor albus existed, the disinfection of the eyes of the child was performed immediately after the birth of the head, before the body was born completely; and from the statistics obtained thus, you will judge yourselves with what success.

The method, which varies a little in the composition and strength of the lotions applied, is the following: Every child, without exception, whether of a healthy mother or of a mother suffering from leucorrhœa, must be subject to it as soon after birth as possible. The closed eyelids are washed and cleaned outside with a lotion of two per cent. carbolic acid. This having been done carefully, the eyelids have to be turned round, so that they form a complete ectropion, with the conjunctiva tarsi entirely exposed. Then, after carefully removing every trace of flaky secretion which may be found there, the conjunctiva has to be inundated with the two per cent. carbolic lotion for one to two minutes, care being taken that the lotion reaches every part of the conjunctival sac. This manipulation ought to be repeated three times daily during the first two days of life. Should the mother have had a very strong catarrh of the vagina, it will be valuable to pad the child's eyes, between the three times of cleaning, with a cotton-wool pad dipped in the same lotion, and renewed every half-hour during daytime.

You will object that this treatment, applied to every case of birth, is a great trouble and inconvenience for the practitioner, who is already hampered enough by his other duties; but let me now show to you the statistics obtained by this method.

In Leipzig, at the Obstetric Clinique, the per-

centage of ophthalmia came down from 13.6 per cent. to 7.6 per cent. at first; and in the following half-year there was, out of two hundred births, only one child subject to ophthalmia; and in this one case the application of the lotions had, by neglect, been forgotten. In Halle, the percentage gradually came down from 12.5 per cent. to 6 per cent. and then to 3.6 per cent. It is obvious that in the beginning, when the nurses were not yet so well instructed, the percentage was yet comparatively great, and then decreased continually. My own statistics are yet small; the results of the experience gathered by me in two of the Liverpool workhouses are not yet numerous enough to be of a great weight, though, during the last four months, while the method was carried out, not a single case of ophthalmia neonatorum occurred. Those cases which I have treated privately, under my own personal care, are only five, but all of them were successful. In each of these cases the mothers brought to me a child which had lost the sight by ophthalmia neonatorum, and consulted me about this child's eyes. All these mothers being pregnant and suffering from fluor albus, I advised them to have the necessary measures taken, that the expected child might be saved from the sad fate of the previous one. They were only too glad to have all necessary precautions taken, and the result was a complete success.

The Action of Resorcin.

Dr. Wm. Murrell says on this subject, in the *Medical Times and Gazette*:—

Commercial resorcin is red in color, and has a strong smell resembling carbolic acid. Pure resorcin, which alone should be used for medicinal purposes, is met with in beautiful white feathery crystals, having very little odor, but a sweet, pungent taste. It is freely soluble in alcohol, ether, glycerine, and vaseline, but is insoluble in chloroform and bisulphide of carbon. It has a neutral reaction, and burns with a bright flame. Its solutions give with perchloride of iron a deep violet color, and with fuming sulphuric acid a yellowish orange tint. It forms a white precipitate in albuminous fluids, the precipitate being probably an albuminate of resorcin.

The observations of Andeer and Brieger, and more especially the experiments of Dujardin-Beaumetz and Callais, have shown that it arrests almost all forms of fermentation, and that it is a powerful antiseptic. For surgical purposes it presents many advantages over carbolic acid; it is probably less poisonous, less irritating; is almost odorless, and is very soluble in water.

In rabbits, dogs, and other animals it exerts a powerful action on the nervous centres, producing epileptiform convulsions. The respiratory movements become superficial and very rapid, and usually the heart continues beating for some time after breathing has ceased. Dujardin-Beaumetz and Callais frequently noticed a considerable elevation of temperature in rabbits which had received a toxic dose.

Its action on man has as yet been but little studied. The ordinary dose is said to be from one-half to three grams, but more may be given. Lichtheim found that after the administration of a full dose there occurred giddiness and buzzing in the ears, the face became flushed, the eyes brighter than before, the breathing quickened, the pulse more frequent by several beats and generally somewhat irregular. In from ten to fifteen minutes after the dose had been taken the skin became moist, and a few moments later the whole body would be bathed in perspiration. He found that it reduced the temperature in fever-free patients by five or six degrees Fahr., and from this he was induced to employ it as an antipyretic. When given in large doses it often induces symptoms of intoxication, with illusions and moaning respiration, but, and he especially refers to the fact, no symptoms of collapse were ever noticed, either during or after its administration. Andeer, on one occasion, took ten grams of resorcin in two hundred and fifty grams of water. In fifteen minutes he lost consciousness, and was seized with epileptiform convulsions. He recovered in five hours.

Remarks on Puerperal Eclampsia.

At the close of a report of several cases of this accident, Dr. Stirton remarks upon it, in the Glasgow *Medical Journal*:—

According to Trousseau, the only disease eclampsia might be confounded with is ordinary epilepsy. There is nothing, he says, in the form of the convulsion to distinguish the one from the other, but the frequency of repetition and continuity of the attacks are the rule in eclampsia and the exception in epilepsy, and that it supervenes on a pathological condition which frequently it is possible to foresee.

It is beyond the scope of this paper to touch on the question of the causation of albuminuria in the pregnant woman; but, like all other obscure subjects, the supposed causes are so numerous as to be sufficient proof of the uncertainty that prevails on it.

It is almost impossible to reconcile the differences in comparing the observations of several authorities as to the relative frequency of the presence of albuminuria in women who are *enceinte*, for one would suppose that, being a matter of fact which could be easily verified, there could not exist such discrepancies of statement. The French observers—MM. Blot, Petit, Hypolitte—say it is present in about twenty per cent. of cases of pregnancy, whereas Galabin, who made forty-three observations, saw it once only, and makes the apposite remark that there are very few observations on the subject in literature. Dr. Hicks, referring to the subject of albuminuria in pregnancy says: "I have not been able to find more than fifty cases on record, and these are given by Dr. Lever (Guy's Reports): in none was albumen present. To these I can add another fifty cases investigated by the gentlemen attending Guy's Hospital Maternity; in only one was albumen present, and in this there was a clear history of old disease of the kidney."

One of the chief causes of eclampsia is albuminuria; and Galabin (*British Medical Journal*, Oct. 30th, 1880), who saw thirty-seven cases, examined the urine in twenty two, and

found it present in all except one, though three had albumen only after the convulsions commenced.

Cholæmia is also recognized as a cause, and it may be questioned whether case number one was not produced by bile (for the urine was not examined, through an accident); but on considering the whole of the general symptoms, I believe it was an acute case of Bright's disease, with dark, bloody urine. Number three case, however, in which the urine was all but solid, had not a single bad symptom, so that all cases of albumen are not followed by convulsions, which compels one to the conclusion there must be some other factor at work, or some difference of constitutional temperament. She is the perfect embodiment of stolidity.

Braun says, in one-fourth of the cases the albuminuria, or rather the uræmia, without eclampsia, is sufficient to induce premature labor; and this seems to bear out my own observations, for all three cases were premature, though number one may have been due to accidental causes.

Aural Affections in Exanthematic Diseases

In the *Archiv für Ohrenheilkunde*, vol. XVI, Dr. Gottstein has a paper on this subject. He refers to the rarity of observations, by competent observers, of the earlier stages of the ear diseases which occur during the exanthemata. From the statistics of Burckhardt-Merian it is seen that of all the cases of ear disease which were referred to the exanthemata, but 16 to 18 per cent. were seen within the first six months of their development; and Gottstein's own statistics are not any more favorable for the observation of the acute stages of disease, and for the determination of the question of how the great destruction which is so often seen in such cases occurs. Wreden, of St. Petersburg, from his connection with the large children's hospital of that city, had most unusual opportunities for early observations. He has reported diphtheritic inflammation of the middle ear as very common in scarlet fever, but his observations have not been confirmed by others, as Gottstein thinks, owing to the ear disease being seen only in its later stages. According to Wreden, the diphtheritic exudation continues only for fourteen days, and is succeeded by suppuration, the stage in which the disease usually comes under treatment. As contributions to this subject, Gottstein narrates three cases—one of croupous inflammation of the velum, pharynx, nose, and both middle ears, in the second week of scarlet fever; one of diphtheria of the throat, with diphtheritic inflammation of the left tympanum, in the second week of measles; and one of acute desquamative inflammation of both tympanic membranes, with perforating tympanic inflammation, in the course of measles. In the first case, two days after the appearance of diphtheritic membranes in the pharynx and nose, great deafness was noticed, and examination showed diphtheritic membranes over both drumheads, which were already perforated, and the same exudation covered the tympanic mucous membrane. From the history, the presence of membrane first in the nose and later within the tympanum, Gottstein concludes that the exudative process extended up through the Eustachian tube to the tympanum and produced the destruction from within outward. In the second case, soon after the appearance of diphtheritic membranes on the uvula, palate, and tonsils, great deafness, without pain or discharge, was noticed in the left ear, and the deeper meatus was found to be covered by similar membrane. After removal of this, the membrana tympani was found perforated and the tympanic cavity in a state of suppuration, but without any membranous deposit, and Gottstein feels uncertain whether the exudation of the ear was an extension from the pharynx or was an independent deposit. In regard to the treatment of diphtheria, Gottstein has never seen the diphtheritic process shortened by cauterization, and considers that therapeutic efforts should be directed to removal of the exudation and to disinfection of the mucous membrane. He advises prolonged baths in aqua calcis, and powdering the diseased surfaces, after removal of the membranes, with salicylic acid.

Reviews and Book Notices.

BOOK NOTICES.

A Manual of Ophthalmic Practice. By Henry S. Schell, M.D., Surgeon to Wills Eye Hospital, etc. With 53 illustrations. Philadelphia: D. G. Brinton, 115 South Seventh street, 1881. Cloth, 8vo, pp. 263. Price $2.00.

This book, which well merits its title, is written with great brevity and clearness. It is well adapted to the wants of the student who wishes to become well grounded in the outlines of ophthalmology, and desires to leave the minutiæ to be filled in at his leisure; and it will be found equally valuable to the general practitioner who can spare but little time in the intervals of his visits to make himself acquainted with the knowledge necessary for the treatment of his eye cases.

The first chapter contains a short account of the anatomy and physiology of the eye, illustrated by ten figures. Chapter II is occupied with affections of the eyelids and with the treatment appropriate to them. Chalazion is treated by the author by slitting up the sac from the conjunctival surface of the lid and scooping out both the gelatinous contents and the sac wall, by means of a sharp spoon made for the purpose. For the relief of the distressing trichiasis which often remains after the cure of trachoma, there is recommended a simple operation, which consists in the excision from the lid of a crescentic slip of tissue which diminishes from a quarter or an eighth of an inch in width on the

skin to a simple incision of the conjunctiva, the wound being afterward closed by deep sutures. Chapter III presents an account of the disorders of the lachrymal apparatus. The directions for treatment are practical and concise. Chapter IV is occupied with diseases of the conjunctiva, for the treatment of which mild applications mostly are recommended; such as collyria of borax, four to ten grains to the fluid ounce of water in catarrhal affections, and half grain solutions of nitrate of silver in purulent or gonorrhœal conjunctivitis. This mild plan of treatment is entirely in accordance with our own experience. A troublesome variety of hay fever is described under the title of autumnal conjunctivitis.

The principle, construction, and mode of use of the ophthalmoscope are very clearly set forth in chapter V, and explained by illustrative diagrams.

Chapter VI is concerned with the subject of refraction and accommodation, all of which, with their anomalies of H. M. and As., are explained in an exceedingly simple and lucid manner.

Chapter VII treats of the ocular muscles, and their disorders, explains the causes of strabismus dependent of ametropia, and the difference in strength of the muscles in certain individuals, and gives directions for the proper treatment by glasses and operations; and explains the asthenopiæ due to reflex irritation.

Chapter VIII deals with the diseases and treatment of the cornea and sclerotic, gives the results of iodoform internally for phlyctenular keratitis; and describes a simple form of bandage for keeping the lids closed, and a useful instrument for removing foreign bodies from the cornea.

Chapter IX gives an account of the diseases of the iris, of great value to the general practitioner, since it points out the means of diagnosis and enjoins the necessity of the use of mydriatics and other therapeutic measures. In syphilitic iritis, the author states that he has seen it occur even when the patient was already under the influence of mercury for other symptoms.

In chapter X the subject of cataract is well treated, and the last and most valuable ideas as to the operations needed for its removal will be found clearly described.

Chapter XI is devoted to the diseases of the vitreous humor.

Chapter XII gives an interesting summary of what is known, by the ophthalmoscope, of the constitutional diseases of the retina and optic nerve, and describes the lesions found in atheroma, Bright's disease, epilepsy, straining, purpura, leukemiæ, essential anæmia, optic neuritis, and cardiac hypertrophy; explains the changes in the eye ground which occur in tumors or diseases of the brain and spinal cord, and indicates how essential the use of the mirror must always be in the diagnosis of many diseases of the nervous centres.

In chapter XIII, we find the diseases of the eyeball, with a clear account of glaucoma, its causes, its diagnosis, and proper treatment; together with instructions for the operation of iridectomy and sclerotomy.

Chapter XIV concludes with an account of the inflammations and morbid growths of the orbit, and defines and advises the therapeutic and surgical means required for their proper treatment.

Dr. Schell has given a valuable addition to the literature of diseases of the eye in this compact manual, in which will be found clearly expressed the last and most trustworthy ideas of the living masters of the subject.

The book is a credit to the publisher, and is made attractive by its excellent paper, good illustrations and clear type. A sheet of test letters is added, which can be pasted on a card for office use. W. T.

Twenty-Sixth Annual Report Upon the Births, Marriages, and Deaths in the City of Providence, for the year 1880. By Edwin M. Snow, M.D., Superintendent of Health and City Registrar. pp. 95.

No city in America has a more perfect system of registration than Providence. The volume before us contains not only everything relating to births, marriages, and deaths, for the year 1880, but also a résumé of the same for the past twenty-six years. While the birth-rate varies considerably from year to year, there has during that period been a gradual decrease. The births in 1880 numbered 2627, or one in 39.92 of population, while the average rate for the past twenty-six years was one in 35.70. The greatest number of births in proportion to the population was in 1858 (one in 28.68), the fewest in 1879 (one in 41.7). The greatest number of marriages was in 1867 (one in 33.23), the smallest in 1867 (one in 53.48), since when they have gradually increased, until in 1881 there was one marriage to every 42.49 of population, a little below the average for the twenty-six years, this being one in 41.20. In the death rate there has also been a great variation, from one in 59.19 in 1867 (a remarkably healthy as well as matrimonial year), to one in 42.01 in 1864. The mortality in 1880 approached the average, one in 50 41; the average for twenty-six years being one in 50.84.

THE

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ADVERTISING AND ADVERTISERS IN MEDICAL JOURNALS.

There is a sensitiveness in the profession in reference to advertisers, which in some respects is well grounded, and in others is carried to excess. Physicians require supplies of various kinds, and they should be made acquainted with what improvements and novelties come out in the line of their wants. There is no way in which this can be done so well as by reading advertisements which set forth the advantages of these novelties. To be sure, the drawbacks to their use, and their imperfections, are not mentioned, but an advertisement must not be regarded as a scientific contribution.

Very much of value in therapeutics, and in surgical treatment, has been introduced by those working only for their own personal interest. Such is the formation of human relations, that the intelligent pursuit of individual interests increases the advantage of the community. It is quite as much so in medical as in other matters, and the effort made by some writers to make it appear otherwise arises from the contemplation of impracticable ideas.

We are, therefore, of the decided opinion that it is desirable for persons having new knowledge, to impart it through advertisements, as well as in other manners. The position taken by a few members of the profession, that the ideal medical journal should not admit any advertisements whatever, appears to us erroneous. It is depriving the readers of a means of becoming acquainted with many interesting facts, and of keeping themselves abreast of much that is transpiring in the professional world. It is also a presumptious though tacit assertion that the advertisers are, as a rule, deliberate deceivers, and on the other hand, that the readers are so obtuse or verdant that they are ready to swallow every statement they see in print. The ground for excluding advertisements from medical periodicals appears to us untenable, and the act of doing so would be a lessening of the value of the journal to its subscribers.

That this opinion is widely entertained is obvious from the fact that there are very few medical periodicals which exclude advertisements, either in this or any other country. Of course, one reason that may be suggested for this is, that it is more profitable to admit them. But it would not be more profitable did there exist any strong and well grounded opinion among the profession that a medical journal ought to be conducted without admitting them. Were this so, did such a feeling have sway, editors would find it more to their interest to cater to it than to seek for advertisers. Such, however, is evidently not the case.

There is a proper limit to advertisements which every periodical should observe, though few do. The pages intended for the perusal of the subscriber, those professedly devoted to returning him the value of his subscription, should not be invaded by advertisements in any form or under any disguise. It is a prevalent habit with many journals to admit so-called "editorial notices" of their advertisers' wares. These notices have the air of being pieces of candid testimony to the value of the article, but are generally put in dis-

tinctly for pay, and often not even written by the management of the journal. We often see these notices in American medical journals, and we consider them nothing less than attempts at fraudulent imposition on the reader. Without meaning to assume any remarkable virtue, we wish to say here that no such notice ever appears in the MEDICAL AND SURGICAL REPORTER. Not a line of the reading columns of this journal is ever made part of an advertising contract. Any opinion offered as to the value of an advertised article is the result of personal experience and actual use, either by the editor himself or some of his medical friends. This course is strictly adhered to, and when any such opinion is advanced, readers may be sure that it has positive ground, and is not a paid notice.

This course of proceeding, while it suits honest advertisers, does not attract those who hesitate about the crucial tests of experiment for their wares. We can recall three large advertisements which we have lost during the past six months by resolutely refusing to put in editorial notices other than fair statements from our own use of articles. Yet all three of these advertisements are now running in several prominent medical journals whose editors must have accepted the humiliating proposal of putting in as their own, various statements of whose truth they had no knowledge. When advertising is conducted in this way, it becomes disgraceful and debasing to editors, and deceptive to readers.

Of another class of journals, those published ostensibly as scientific periodicals, but really as advertising organs for manufacturers, we have in the United States an ample supply. They are not quite what they pretend to be, and necessarily the statements in their pages are colored by the interests which give them existence. For this reason they must constantly be quoted with reserve; and we should rather see this class disappear than prosper, until they are ready to show their true colors. They pretend to be impartial distributors of scientific news, and to be edited in the interest of the profession, when they are not.

NOTES AND COMMENTS.

To Our Subscribers.

Our subscribers will greatly oblige us by a prompt remittal of their subscriptions for the coming year. The journals we publish are "payable in advance," and although we do not at once stop them when a subscription expires, we cannot continue them long afterwards.

In order, therefore, to prevent any misunderstanding, and to avoid the unpleasant necessity of sending "duns," we earnestly request that all subscribers will forward us, by or before the middle of January, the amount for 1882.

We can promise them, in return, that the REPORTER will be in every respect equal to any other medical journal published in the United States.

As an inducement for our old friends to aid us, we offer:—

1. Any old subscriber who remits us ten dollars, five for his own renewal, and five for a new subscriber, will receive a credit of $2.50 in purchasing any of our publications.

2. Any old subscriber who remits fifteen dollars, five for his own renewal, and ten for two new subscribers, will receive credit of $5.00 on any of our publications.

We hope that all will renew, and that all will aid us by commending the REPORTER to their friends.

Therapeutic Notes.

FOR CHORDEE.

℞. Amyl nitrite, gtt. iij–v.

Said, by a writer in the *Medical Record*, to be a very effectual remedy in chordee and painful priapism.

FOR CORYZA.

A writer in the *Union Méd.*, recommends the following, at the commencement of a cold:—

℞.	Acid. carbol. cryst.,	5 parts
	Alcoholis,	15 "
	Liq. ammon.,	5 "
	Aquæ destill.,	10 "

Let a few drops fall on blotting paper, and inhale at a distance, through the nose and mouth.

APHRODISIACS.

According to Dr. Bartholow, the following are distinctly aphrodisiac combinations in functional generative debility:—

℞.	Ergot. extract. aquos.,	℈j	
	Sanguinariæ pulv.,	gr. ij.	M.

For twenty pills. One three times a day.

Or,

℞.	Tinct. sanguinar.,	ʒiij	
	Stillingiæ ext., fluid.,	ʒv.	M.

Fifteen to twenty drops in water, thrice daily.

BENZOLE VAPOR IN WHOOPING COUGH.

A writer in the *Lancet* recommends, in whooping cough, benzole vapor, as prepared by a Lister spray apparatus or similar vaporizer. He has tried it with gratifying success.

Ecthyma in Smallpox.

M. Ducastel signalizes the appearance of ecthyma in some of his patients at the St. Antoine Hospital. The eruption first appears on the chest during the evolution of the variolous eruption, or after its dessication. The evolution of the pustules is rapid, lasting about ten days. The affection is accompanied with grave general symptoms, which sometimes cause death.

It would seem contagious, as a house-surgeon and nurse contracted the pustules while exposed to the contact of the patients. In the pustules M. Ducastel found a considerable number of spores, but nothing in the blood.

Treatment of Compound Ganglion.

At a recent meeting of the Société de Chirurgie, M. Notta mentioned a case where one of these tumors occupied the palm of the hand, extending above the wrist. He made three incisions, from which a large number of small granular masses (grains hordéiformes) escaped. Rubber tubing was inserted into the palmar wound and brought out through the incision in the forearm; this was removed next day; the progress of the case was slow and ultimate cure obtained about four months later.

M. Verneuil remarked, in the discussion which followed, that he was formerly timorous of operating in such cases, but that at present, with antiseptic precautions, he had obtained permanent cure after free incisions, in two cases, at about the twentieth day.

MM. Desprès and Trelat, were of opinion that complete cure was obtained in these cases only after suppuration; that union by first intention was to be condemned, for the cystic cavity should be filled up by slow cicatrization.

M. Nicaise remarked that in M. Notta's case, as in his own, there was a great number of riziform bodies and little liquid; he observed that the tendons were atrophied, and some even dissociated. Perhaps the intense pain remarked in M. Notta's case, was due to the injection of a twenty per cent. solution of carbolic acid.

M. Lucas Championniére agreed that the pains were due to the injection of the carbolized solution, as such is the case when it comes in contact with a large exposed surface.

M. Notta replied that he had noticed fringe-like processes on the tendons in his case, but he considered the pain as due to the tube inserted, as it disappeared when this was withdrawn.

The Value of Meat Extract.

Dr. Lownds has a good deal to say on this subject, in a late number of the Edinburgh *Medical Journal*, especially with reference to Liebig's extract. He observes:—

This preparation of Liebig's is not only very useful in Asiatic cholera, but in all diseases where there is a deficiency of assimilation. I have used it successfully in septic poisoning after operation, in pyæmia, in the worst cases of diphtheria, in typhoid fever, etc. I need not mention particulars, but may add that in a severe case of typhoid accompanied with blood in the stools, which medicines failed to check, the number of stools was at once reduced from four to five daily, to one every two or three days for the next week. The blood ceased at once. The rationale of this result, I attribute (whether rightly or not), to the almost absolute rest which it gave to the stomach and intestines, as no digestion was required. In this case it was given mixed with a small quantity of claret, in order that the wine might disguise its color from the lady patient. It may be given to the youngest infant. It apparently saved the life of a child, under three weeks old, when nothing else could be retained on the stomach. The irritative diarrhœa in this case was set up by giving the milk of an Alderney cow, too little diluted with water. Diarrhœa was followed by urgent vomiting and a state bordering on collapse. Then a considerable number of large abscesses appeared over all the body, scalp, and upper extremities. After the use of this food for three days the infant was able to retain ordinary chicken soup, and it gradually recovered.

On the Value and Safety of Administering Large Doses of Iodide of Potassium in the Late Lesions of Syphilis.

The *Medical Record* November 26th, 1881, contains a communication by Dr. M. H. Henry, in which he gives the history of a very interesting case of dementia and hemiplegia due to syphilis, in which small doses of iodide of potassium had failed to effect little, if any, improvement. Beginning with thirty grain doses three times daily, and gradually increasing both the quantity of each dose and their frequency of administration, until three hundred grains per day was reached, there began to be a marked daily change for the better. In this case, as

the doses were increased the improvements were most marked. The patient took three hundred grains daily for more than eight weeks, and with the disappearance of the syphilitic symptoms, he gained steadily in his general health and in flesh.

He was discharged, cured, nearly ten years ago, and has enjoyed good health ever since. He is stout and hearty, and is in full possession of all his faculties, and has been for many years attending to his business. He bears no evidence of any syphilis, and certainly none of any disease of the kidney; nor was there any albuminuria during the time he was under treatment. The doctor adds, that he frequently meets patients who were under his care as far back as 1864, and who, in the course of treatment, have taken very large doses of the iodide. They are invariably doing well, and bear no evidence of disease of the kidney or any lesion of syphilis.

Chlorhydric Acid in Chlorosis.

Dr. Zander, in the *Centralblatt für die Med. Wissenschaften*, contests the exactitude of the widely spread opinion that chlorosis is due primarily to an alimentation containing too small a proportion of iron. The malady is induced by default in the absorption of iron introduced with the food, because the gastric juices do not contain a sufficient proportion of chlorhydric acid. The result is that the albuminoid principles are incompletely digested, and nutrition languishes.

With this view of the question, the author has had recourse, in the treatment of chlorosis, to the following solution:—

℞.	Acid. chlorhydric,	2 to 4 grams
	Aquæ destill.,	200 grams. M.

One or two tablespoonfuls of this solution may be taken after meals, and in obstinate cases pepsin may be added.

This treatment has, in the experience of Dr. Zander, given good results.

State of the Bones in Paralyzed Limbs.

Much attention has been devoted during late years toward the changes consecutive to old cerebral lesions. As is well known, since the researches of Charcot and Brissaud (1879), muscular atrophy is much more common than was formerly supposed, in the paralyzed limbs of hemiplegic patients; but up to the present the bone lesions have received little attention. M. Debove, in a recent communication to the *Soc. Médicale des Hôpitaux*, observed that he was led to make researches on this subject, through noticing that fractures in hemiplegic patients always took place in the paralyzed limb. He found on examination that these bones were lighter than those of the other limb: on transverse section the medullary canal is found much enlarged, and the compact tissue less thick. The haversian canaliculi are larger, and contain more fatty matter. There is a vertical condition of osteo-porosis, which explains the facility of fracture of these bones. These fractures are rapidly consolidated and there is generally a voluminous callus.

Special Reports.

No. XX.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M.D.

(*Continued from Vol.* XLV, *page* 611.)

That hereditation, as well as consanguinity, plays an important part in accounting for many abnormally shaped eyes, we do not deny, but we are likewise confident that the imperfections in our school buildings, as well as the methods of the present educational system, are mostly to blame for the large percentage of what cannot be considered emmetropic (standard) eyes, that we are forced to notice, not only in the present, but also in the rising generation.

In concluding his valuable report concerning "Weak Eyes in the Public Schools of Philadelphia,"* Dr. S. D. Risley makes a most pertinent remark, which, in our opinion, might be printed in flaming type, to be held before the eyes of every parent in the land, viz. "Our children are placed at school at a too tender age."

To those interested, we would recommend a careful perusal of this Report, which, for want of space, we can only refer to in passing. It has been abridged as printed, and although occupying many pages, cannot be quoted in parts. It is intended more for ophthalmologists and especially educated physicians, but no one can read it without being impressed by many points of marked practical value to the general practitioner. The questions involved are innumerable and intensely practical, and a volume might be written upon the subject.

In conclusion, Dr. RISLEY says:—

"That the probability of harm resulting from the school life diminishes with every added year of age, in all states of refraction.

* The Report of the Committee on Examination of the Eyes of the Children of the Public Schools of Philadelphia, by S. D. Risley, M.D., Chairman. Philadelphia *Medical Times*, July 30th, 1881.

"*Therefore, that our children are placed at school at a too tender age.* (Italics our own.)

"Sixth. That in view of the facts herein set forth, the great importance of proper hygienic surroundings and a wisely chosen and arranged curriculum of study is more than ever manifest.

"In arranging the course of study, the principle to be kept in mind is the avoidance of protracted use of the eyes at a near point—*e. g.*, in reading, writing or drawing."

Why not at a far point? Because the accommodation is then supposed to be relaxed. So it would be, if the far point varied. It does not vary in the majority of class-rooms where the black-board, now so universally used, is at a fixed distance for every scholar. Then, too, there is generally a strong light shining into the scholar's eyes, and this contracts the pupil; the iris, the lenticular system and the external muscular apparatus are in turn irritated, and direct or reflex spasm of accommodation is again induced.

The system of black-board education we would, from experience, condemn; so also the plan of allowing the children to study or read from books lying upon a desk or table; likewise the admission of light opposite, or at right angles to the face of the student; and last, but not least, glass partitions with swinging or sliding sashes, as now so generally used to separate class-rooms.

We have condemned black-boards as used in our public and other schools, and in this connection we can recall many interesting conversations we have had with teachers in our public schools, who, with us, have noticed the failure, one by one, of the distant and subsequent near vision of their scholars.

Black-boards are of varying shades, from a light gray to a jet black, either dull, or it may be, glistening. Some of these take the chalk, others do not, hence the tracings vary. Most teachers write delicately, a few coarsely, while the majority of children, as they are in turn called to the board, put the chalk on lightly; the children at their seats, meanwhile, must, usually under the most trying circumstances, decipher what is written.

We must also study the source of light and its varying reflexes. Often enough to make it the rule, the black-board is between two windows or close by one or more, the light from which shines directly into the eyes of the pupil; or, on the other hand, is reflected from the polished surface of the black-board; in both cases causing *contraction of the would-be dilated pupil* (the act of looking at a distant object having meanwhile relaxed the accommodation), and induced more or less *spasm of accommodation*, blurring of distant images, congestion of the eyes (conjunctivitis, retinitis, etc.), to say nothing of general fatigue, headache, etc.

Half, or it may be all, the time, this strain is kept up, the eyes strive to make out distant objects, and in so doing the accommodation is relaxed and mis directed light irritates the retina and causes at the same time contraction of the pupil: thus a constant effort is called for on the part of the human optical apparatus, which, like all things human, must give out with fatigue.

If no window serves the purpose of throwing light directly into a child's eyes, or indirectly reflecting it in the same direction, the fashionable but detestable—for more reasons than one—glass partitions, with sliding, or worse, swinging sashes, reflect many lights and colored images into the irritable eyes of the coming generation.

Children in the country school houses, as they stand in classes, or sit upon benches without desks before them, are rarely seen to acquire errors of refraction. They are caused partly by the comforts of civilization, economy of space and neglect of hygienic rules. One of the best systems ever instituted is the one now employed at the Philadelphia Central High School, of this city. Class rooms are changed hourly, and pupils go from the first to the second or third floor, and so secure muscular exercise and a change of air. Our Alma Mater is to be congratulated upon this system, which does more for her boys than parents or guardians can at first thought fully estimate.

Herein lies the secret, coupled with the valuable advice of Dr. Risley, and we cannot repeat it too often, viz: "Our children are placed at school at a too tender age." *Our children are compelled to sit still too long at one time. They must use their eyes for fixed near as well as for fixed far points, while surrounded by various sorts of embarrassing influences, such as bad air, improperly arranged light, dazzling glass partitions, etc., etc. They must use their eyes all day under unfavorable circumstances, and after dark by artificial light as well. They are limited as regards their motions, the exercise of their limbs and voices, the exercise of their animal functions, the amount of fresh air they breathe, etc.*

Dr. Jas. Collins, of this city, recently called our attention to two cases which serve to illustrate the dangers of keeping children sitting too long in one place, and so limiting their motions. In one girl, a serious impaction of fæces occurred, because, at school, when she wished to relieve the bowel, she was compelled to sit still, and when she was finally allowed her liberty, the

desire had passed away. Day by day this thing went on, until the Doctor was summoned to find the bowel packed with fecal matter. In another, an ambitious girl came home from school complaining of being unable to pass her urine. Why? Because the bladder had not been emptied, and becoming enormously distended, was paralyzed. A severe and dangerous inflammation of the bladder was the result of this child's being unable to secure an opportunity of empyting her bladder at times when nature made the demand. These are seemingly trifling affairs, but they count in the life of a child. Would that most of the teachers of our schools for children could dispense with the rule and precept, and the dogmatic systems of educational methods, and use their common sense, and make practical application and teach what they know of human physiology. Better let the drawing, the music, the algebra, etc., etc., go, and give our hard-worked teachers more practical knowledge and less of the fine arts. Give them more holidays and our children too. The old saying, "All work and no play makes Jack a dull boy," is too often forgotten.

Innocent little children, with their confiding, it may be precocious dispositions, which are most pliable on account of tender age, are sent from home, from parental influence, from their mother's knee, to school, to meet older children, not always possessed of the best habits and language, to grow up and have their characters moulded by external, surrounding (school or street) influences, to be under the care of teachers who, as a rule, do their best at their arduous employment. Admitted each teacher does her full duty, the classes are so large, that, *while acting as a nurse*, she can, at best, devote but little time to each especial child, and its on the one hand precocious, or on the other phlegmatic, peculiarities. Why, then, do parents send their children to school so soon? The answer may be divined from what we have already said: Because they want to get rid of them. Their prattle, their mischievous ways, their wants and their fancies, consume too much of busy papa's or giddy mamma's time, and alas too much of their patience. They seem to want these little, restless, buoyant members of the coming generation anchored in some harbor, where each little craft may ride safely, but not lazily, at anchor, and gradually become barnacled by disease, and have its essential parts twisted and warped by the elements of external influences, simply for want of active and varied service in the sunshine and atmosphere of suitable surroundings.

Here, however, we would pause. Many who would prefer it, cannot have their little ones with them. Many parents must go to work; to the mill, to the forge, to the laundry, to service, etc., etc., and toil for their daily bread. Their children *must* be cared for. They should be well cared for, too, that they may grow up to be equally strong, physically and mentally. They, with other little children, who will be sent to school, *must have fresh air and freedom of motion*; must have nursery schools, kindergartens, and such; and these once established, more children would be taken from the streets and alleys, and be saved morally as well as physically. What is a too tender age? All the way from four to ten, and even twelve years of age boys being, however, two or three years in advance of girls; all, however, depending upon the child's disposition. *Healthy children were never known to sit still for any length of time*; the mere fact of their being still often suggests the thought of their not feeling well. To compel them to do so for more than one hour at a time, is a crime against the coming generation, and against fair Hygeia's laws

We cannot conclude without referring to one other practical point made by Dr. Risley,* in his Report, wherein he states:—

"One fact, however, has not yet been dwelt upon with the urgency which its importance demands. Allusion is made to the bad condition of the eyes in the primary classes. Myopia is shown to be on the increase, and other forms of disease increase at eight and a half years of age, even in emmetropic (normal) eyes. The lesson it is desired to impress just here, is, that in the eyes of these young children was being laid the foundation, in intra-ocular disease, for a future myopia. Protected at all other points, by the watchful care of parents, they had nevertheless been subjected to the duties and cares of their early school life without a thought regarding their eyes, without the most cursory inquiry, except in rare cases, being made as to whether the eyes were fitted to perform safely their important function." Consequently, he, in this connection, concludes, therefore, "that before entering school the possible existence of defective vision should be excluded."

Finally, we can, on the authority of Dr. Risley,

"Comfort ourselves with the observation that, injurious as our school work is, and bad as is the outlook for the future of the eyes of our school children, it is far better than in the Russian schools; while a comparison with the German tables would show even greater cause for congratulation."

The question, *sub judice*, should not only attract the attention, but also deeply interest all parents, teachers, physicians, and those interested in edu-

* loc. cit., p. 685.

cational matters. The subject matter, *i. e., the defects in our educational system, buildings, etc., and their relation to the defects of sight in school children*, wants ventilation, and should excite criticism, for well might it be discussed under the popular title of one of "The Dangers and the Duties of the Hour."

EXPERIENCE OF A RED-BLIND PHYSICIAN WITH THE OPHTHALMOSCOPE.

Dr. W. S. LITTLE, of Philadelphia, mentions the case of a physician who was color blind (red blind), and narrates his experience with the ophthalmoscope. He was enabled, through Dr. LITTLE'S instructions to study the fundus oculi in the negro, whose eye ground presents a grayish reflex, in contradistinction to the red reflex from the eye ground of a white person. In endeavoring to recognize the normal fundus in the eye of a white person, he stated that it presented to him the following appearance: The reflex appeared to him as the sky, bluish; the papilla optica or nerve, white, and the vessels in and upon it, as dark lines; the darker lines being the veins. In a case of marked kerato-iritis, with the cornea largely injected with blood, appearing very red, he failed *to see* the *color*. Dr. LITTLE also says, color blindness has its advantages as well as its disadvantages, and mentions as A PRACTICAL ADVANTAGE OF COLOR BLINDNESS, the ability of those so affected of becoming skilled engravers, and says: "youths knowing they are color-blind, can adopt the engraver's art as a means of livelihood, and advance the art of engraving, which is so productive of pleasure to those who are not color blind (*Arch. of Ophthal.* Vol. x, No. 1).

Dr. R. JUST, of Zittau, Saxony, makes

A CONTRIBUTION TO THE STATISTICS OF MYOPIA.

He italicises the following pertinent remarks: "*Myopia being as frequent in the new schools of Zittau, as in other educational institutions of the same kind, we may fairly conclude that it does not chiefly result from insufficient illumination of the school rooms, but rather from the great and ever increasing demands on the industry of the pupils at home, forcing prolonged labor on their eyes during the evening hours, frequently, by insufficient artificial light.*" He then goes on to say, "I am far from underrating the dangers of bad sanitary condition in the school room, but would urge the necessity of disencumbering our children's eyes of as much evening work as possible." (*Archiv. Oph. and Otol.*, Vol. x. No. 1, translated by H. KNAPP.)

ON THE APPLICATION OF ELECTROLYSIS IN OPHTHALMIC THERAPEUTICS.

By A. NIEDEN, of Bochum (translated by Isidor Furst, New York.) He recommends electrolysis for angiomata of the eyelids, and says, thanks to the observations and experiments first made in 1831, by ALPHONSE GUÉRARD upon the equally inaccessible aneurisms of the larger blood vessels, we have another mode of treatment in electrolysis. He uses a portable constant apparatus, made by KRUGER, of Berlin, after the model of SPAMER. He always employs *bipolar percutaneous electrolysis*. He uses both needles, and adds, my view corresponds with that of ALTHAUS* who also advises to introduce only the negative needle into the angiomata, and says he never saw any injurious effect, despite a great temporary bulging of the tumor, by the developing of gas bubbles during the operation, from the brief existence of this hydrogen. In recapitulating the advantages derived from the different modes of application of the electrolytic current, we find, with reference to its coagulating and caustic effects, that they consist in: 1st. Its applicability for the removal of neoplasms where other means fail or are of too uncertain and dangerous a nature. 2d. Tumors, cavernomata, angiomata, telangiectatic tumors, may be destroyed without entailing a loss of substance of the normal covering. 3d. The extent, the effect sought to be attained, may be accurately determined by the number of the needles introduced, the number of the cells, the duration of the application, and the strength of the electric current. 4th. We may operate almost without any loss of blood, by employing some degree of care in withdrawing the platinum needles, and, moreover, the pain is generally very moderate. 5th. The application is easily learned and quite free from danger; it alarms the patient less, on account of the simplicity of its manipulation, than any other surgical procedure. Finally, regarding the employment of the constant current as an alterative remedy which induces absorption—in which quality it may be looked upon as electrolytic—it has been recommended mainly for the clearing up of corneal opacities, absorption of iritic membranes, etc. QUADRI, of Naples, TURK, WILLEBRAND, of Helsingfors, v. GRAEFE, MEYER, and CHVOSTUK, claim to have secured quick and important results in the above named affections, by applying the negative pole to the closed eye, and the positive pole to the hand or mouth, and by galvanization of the sympathetic

*J. Althaus. A Treatise on Medical Electricity. London: Longman & Co. p. 361.

nerve. My observations did not furnish the favorable results reported by these authors. I could demonstrate neither a quicker nor a more perfect clearing up of corneal opacities, no matter in what form these currents—necessarily very weak in these cases—were applied.

Neither can I concur with the observations of v. GRAEFE (*Deutsche Klinik*, 1852, p. 445), who was able to effect the quick absorption of a cataract by the application of the constant current" (*Archiv. Ophth.* Vol. x, No. 1, p. 26).

We have frequently been consulted in good earnest, by men of good standing, concerning the treatment of cataract by absorption or the use of the constant current, but the experience of such men as NIEDEN, KNAPP, and others, goes to disprove the efficacy of this method of treatment, which can only be recommended as a novel placebo, the employment of which is ridiculously charlatanic, if not altogether dishonest.

Dr. S. C. AYRES, of Cincinnati, reports two interesting cases of

RETRO-BULBAR HEMORRHAGE.

In one it occurred in the case of a woman aged 56, who was operated on (iridectomy) for absolute glaucoma. She recovered and V = $\frac{2}{30}$. Three years later, having gone to bed as usual, she was aroused soon after with a pain in one eye. She got up and used a camphor lotion, and took two compound cathartic pills and soon after commenced to vomit, having been accustomed to occasional attacks of nausea and vomiting. The eyes became prominent and vision failed, and finally disappeared entirely. In the other, it occurred in a coal-heaver, aged forty. The exophthalmus was not so great as in the first case, and having had no previous eye trouble, no such disastrous results followed. Treatment: rest, compress bandage, and the occasional use of cathartics (*Archiv. Ophthal.*, Vol. x, No. 1, p. 43).

Dr. J. HIRSCHBERG, of Berlin, says of

MALIGNANT TUMORS OF THE EYE,

that they are not only important in themselves, but also for the light they are apt to throw on obscure parts of general pathology. In 1864 VIRCHOW published his fundamental work on tumors, and declared that in the clinical observation of their course and character everything was still to be done. Ophthalmologists have recognized his teachings, and having exact methods and fortunate circumstances for diagnosis, have applied them to the eye and furnished important contributions to the development of clinical onkology.

As early as 1868, v. GRAEFE, KNAPP, and others described minutely the etiology and clinical course of the principal tumors of the eye, and showed that they were localized new formations, and by this discovery threw light upon many questions as to the general nature of tumors. They furnished, especially, examples of the general law of VIRCHOW, that malignant tumors begin as localized affections, which, if removed at an early stage, never return. They spread to distant parts by dissemination and metastasis. Dr. HIRSCHBERG confines himself to the three principal forms of tumors in the eye, *glioma retinæ*, *sarcoma uveæ*, *melano-sarcoma and carcinoma præcorneale*, illustrating them by clinical histories and lithographs of microscopical specimens. and the article as translated by Dr. W. C. AYRES, of New York, cannot but fail in attracting the attention of all pathologists. (*Arch. Ophthal.* Vol. x, No. 1).

ON QUININE AMAUROSIS,

Dr. E. GRUENING says, "almost every modern text-book on ophthalmology contains in its chapter on toxic amblyopia and amaurosis some general remarks on the occurrence of blindness, after an overdose of quinine. If we collect the recorded cases upon which these general statements are based, we find that the material is rather scant. By searching the literature, I have been able to collect *eleven* cases.*

The first case on the list (Giacomini, 1841, *Annal. Univers. di. Med.*, quoted by Binz, in the *Real-Encyclopædia der Gesammten Heilkunde*, edited by A. EULENBURG article "Chinarinden,") has never before been cited in ophthalmic literature. If a physiological experiment on man had been instituted with due care, and with the elimination of every possible source of error, it could not prove more conclusively, than does this case, that temporary blindness may result from an overdose of quinine.

A man aged forty five, suffering from constipation, took, by mistake, three drachms of sulphate of quinine, at one dose, instead of cream of tartar. Within an hour he felt great pain in the head, stomach ache, dizziness, general debility, and finally became unconscious. The face was pale; the lips and extremities livid and cold. The pulse was uniform, slow, hardly perceptible; the respiration sluggish. The pupils were very much dilated. When consciousness returned, sight and hearing had almost entirely vanished, the

* 2, 3, 4, 5, Briquet. Four cases of incomplete amaurosis, quoted by Binz (l. c)

6, 7. Graefe. Two cases of quinine amaurosis, *Arch. f. Ophthal.* Vol. III, part 2, p. 396.

8. Voorhies. Temporary blindness from quinine. *Transactions of the Am. Med. Asso.* 1879.

9. De Wecker. Ocular Therapeutics. Translated by Litton Forbes. Quoted by Roosa.

10, 11. Roosa. Poisoning from the use of the compound tincture of cinchona. 2. Amblyopia from quinine (?) *Arch. Ophthal.* Vol. VIII, No. 3 and Vol. IX, No. 1.

general prostration and the weakness of sight and hearing lasting a long time.

In some of the cases on our list the authors themselves were in doubt as to whether the disturbance of sight was really attributable to the action of quinine. Thus, GRAEFE says that in his cases some predisposing causes may have been present, *e. g.*, the condition of the blood in malaria, the accumulation of pigment granules within the cerebral vessels, etc., etc. ROOSA publishes his second case of quinine amblyopia (?) with an interrogation point.

If I now record my case as one of quinine amaurosis, I do so because, in the first place, I can exclude other possible causative factors without strain, and because, in the second place, I find in the few well observed and more minutely reported cases of quinine amaurosis a number of parallel, I may say pathognomonic, points which stamp this affection as one *sui generis*.

GRUENING'S CASE.—Woman aged thirty-five, threatened with a miscarriage at about the sixth week of gestation. Slight flow of odorless blood from uterus for several days. Discharge then became fetid and contents of uterus were removed artificially. This procedure was followed by a rise in temperature (106 F.) Sulphate of quinine was administered in ten-grain doses. Altogether eighty grains were given within thirty hours. After the last dose she had a convulsive fit, characterized by twitching of the facial muscles, and jerking of the extremities. She did not lose consciousness during the attack. After the attack had passed, she was found to be totally deaf and blind. Gruening saw her and found pupils dilated. Accommodative contraction, however, was clearly demonstrable when the patient was caused to make a strong convergent effort. Refractive media clear. Optic disks were very pale but transparent, and their outlines well defined. The retinal vessels, both arteries and veins, so attenuated, that, in the inverted image, they could scarcely be perceived. In the upright image the vessels were distinguishable as continuous, exceedingly narrow bands, tapering into fine points somewhat abruptly. The slightest pressure upon the eyeball sufficed to render all the retinal vessels absolutely bloodless. At the macula of each eye there was a cherry-colored spot, surrounded by a zone of bluish-gray opacity. The corneæ were not anæsthetic (case of Voorhies). The blindness was absolute. The bright light of an argand lamp, concentrated upon the eye by means of a convex lens, was not perceived. No phosphenes by pressure. No specific reaction of optic nerve by the galvanic currents. Temperature 110½°. Pulse 120, very feeble. Constant noise in head interfered with hearing. Heard watch on contact. No injection of tympanic membranes. No albumen in urine. Twenty-two days later the patient could discern the position of the window in the room. Three days later light perception returned. Over a month later she read large type, although, on account of the occurrence between while of the menstrual period, sight was temporarily diminished. Letters appeared white, and on a black ground. She was totally color blind, objects appearing "as if photographed." The fields of vision enlarged, advancing concentrically, being, at the approaching return of sight, very much reduced by concentric limitation. Finally complete recovery of sight (chromatic sense restored), and hearing. Therapeutic agents were necessarily directed toward the reëstablishment of retinal circulation. A generous diet, a recumbent position (the head on a level with the body), instillations of a one per cent. solution of sulphate of eserine, inhalations of nitrite of amyl, with the administration of digitalis."

We have, for want of space, been compelled to abbreviate the report, with remarks upon this most interesting case which Gruening has worked up most thoroughly. He concludes upon well-founded arguments, as follows:—

"We have eliminated hysteria, retinal anæsthesia, embolism of the central retinal artery, apoplexy of the optic nerve (Magnus), amaurosis following hemorrhage, uræmia and retro-bulbar neuritis as affections differing from quinine amaurosis in their onset, course, termination, and ophthalmoscopic appearance. *On reviewing the unequivocal cases of quinine poisoning with amaurosis* (Roosa, Wecker, Voorhies, Gruening), *we find a remarkable congruence in their essential features. The patient after the ingestion of a single dose, or of repeated doses of quinine, in varying quantities, suddenly becomes totally blind and deaf. While the deafness disappears within twenty-four hours, the blindness remains permanent as regards peripheric vision, central vision gradually returning to the normal after some days, weeks, or months. The ophthalmoscope reveals an ischæmia of the retinal arteries and veins, without any inflammatory changes.*

In view of the constancy of these symptoms, and the uniformity of the ophthalmoscopic picture, we are entitled to demand for this distinct type of amaurosis a recognized position in the pathology of the optic nerve and the retina." (*Archives of Ophthal*, Vol. x, No. 1.)

We have copied Gruening's italics verbatim, and would in this connection call especial attention to the study of this form of *temporary blindness*, always accompanied with *temporary deafness*, and note the fact that no authenticated case of permanent blindness nor permanent deafness is on record. When we take into consideration the hosts of those persons who abuse quinine, as well as the heroic doses of this valuable drug often necessarily prescribed, we must admit that if it be the poison that many would make it out to be, the blind and deaf victims of overdoses would be legion.

(*To be concluded.*)

Correspondence.

Cerebral Lesions.

Ed. Med. and Surg. Reporter:—

Having heard, even from physicians, who should know better, that a man who has lost a portion of brain substance must necessarily die, I am glad to report to your journal the following case that occurred in my practice:—

On the fourth of last December I was called to go thirty-two leagues out of town, to see a boy, sixteen years old, who had accidentally shot himself through the head. Telegram said: "Eug. F., wounded: brain out; send Dr. Gonzalez immediately." The accident had happened two days before, and nobody thought to send for a physician, believing the boy, of *course*, was about to die; but after twenty-four hours had elapsed and the patient was still alive, his relatives conceived the idea of possible recovery, and so they sent for me. I started as soon as I could, taking along with me my trephine case. I reached there on the fourth day after the accident, when he was feverish and in a comatose state, with the face so immensely swollen that he could not open either eye, and scarcely the mouth; he answered no question whatever while examining the wound. I learned it was inflicted by a Smith's revolver of large calibre; the projectile had penetrated the right temporal bone at the middle and anterior edge of its squamous portion, traversing the cerebral mass, passing underneath the longitudinal sinus, and finding its exit to the left of the union of the two parietals with the frontal. The total length of the wound was about four and a half inches; the orifice of entrance nearly three quarters of an inch in diameter; that of its exit a little larger. As I proceeded, I found the edges of either orifice ragged and obstructed by a large mass of cerebral substance, that at once I recognized by its peculiar color and consistence. The temporal hernia was in bulk as large as half a small lemon, and the other a little smaller; in the space between the two orifices I found a smaller one, caused by a piece of bone. I could detect four distinct pieces of bone; two belonging to the parietal one to the temporal, and a large one to the frontal. When pressing over the direction of the wound, the skull yielded to slight pressure and each bone could be seen to move separately. This was the condition in which I found the young patient on my arrival. With a compound comminuted fracture of the skull, with double cerebral hernia and some spiculæ of bone buried somewhere in the encephalon. Besides all this, the attendants had noticed, since three hours before my arrival, repeated contortions of the face, that I witnessed but once. I understood immediately that I had to deal with a compression of the brain caused by serous exudation.

I proceeded to treat him as I always do such difficult conditions, symptomatically; for I believe that any one who attends his patient, always according to treatment generally given by authors, frequently will fail. It is well for him to follow general considerations, but in regard to treatment, it cannot be marked beforehand. It then the occasion for a surgeon to exhibit his own judgment. Believing that the compression that commenced to appear was the most immediate and dangerous symptom, I prescribed a good dose of bromide of potassium, and two hours after some calomel, followed by a good dose of cream of tartar. I then commenced to use, for the immense serous effusion of the face, solution of muriate of ammonia, a drug in which many have no faith at all; but their failure is due, I believe, to not selecting the proper time for its application. If they use it when the effusion has become plastic, they will always fail, no matter how recent is the plasticity, but if they limit the use of the muriate to recent serous exudations before the plasticity is shown, they will not be disappointed, unless the part has been contused, and its vitality lowered; then I generally succeed with same, using beforehand some stimulating lotion. When once I had got rid of the symptoms of compression, I occupied myself with the wounds. I proceeded by examining the protruding brain substance, that was all lacerated, and wherefrom I extracted several pieces of bone that were there buried, without attempting to hunt more until they became visible. Some authors recommend to treat such cases by compression of the hernia, but in this particular, where the protruding brain substance was so lacerated, would it be prudent to use the compress when I knew that I had to wait for suppuration as the result of all buried and turned tissues? Certainly not, for if I had done it, accumulation of disorganized matter within the skull would have taken place and a sure death followed the proceeding; and as the patient had neither cough nor vomiting, I declined using the compress; but as the bulging hernia was occluding the orifices both of entrance and exit, I proceeded, cutting cautiously, little by little every day, the brain substance that formed the hernia, until I commenced to encourage cicatrization at the sides of the wound, getting at the same time rid of the bruised brain substance that could degenerate into pus, and as I have sliced repeatedly the cortical and upper part of the cerebral hemispheres, including deep convolutions that bulge out, having at the end the most happy result, I do not hesitate to recommend similar treatment to my professional brethren.

I write this ten months after the accident, and I cannot yet discover any change in his natural disposition, nor failure in any of his mental faculties. He is as well as he was a year ago.

Durango, Mexico. V. Gonzalez, M.D.

Is it a Case of Bright's Disease?

Ed. Med. and Surg. Reporter:—

I report the following case for two reasons:—

1st. To show the insidiousness of disease and the care that is necessary to be exercised in arriving at a diagnosis.

2d. There is a difference of opinion with the medical attendants, one claiming that it is not Bright's disease.

Wm. L. M. L., aged forty one, complexion florid, medium height, and good weight; a man of irreproachable habits; he never used tobacco, or intoxicating liquors of any kind; no venereal disease or excesses. Until he arrived at the age

of twenty-one he worked hard at both manual and mental labor, since which time he has done little or no manual, but a very great deal of mental labor.

About ten years ago he lost his wife, under very peculiarly painful circumstances, and it was a great shock to him, from which he has never completely recovered.

About eight years ago he had a hemorrhage in the left eye, and was blind of that eye for a long time, but eventually regained the sight. Again during this period he was confined to the house for a couple of days with what might have been acute articular rheumatism of the ankle joint. Aside from the troubles given above, he was one of the healthiest men of the town. I have often heard him say that he did not know what it was to get tired. He has been a thorough and very active business man; attending to a number of estates, a bank director, etc. etc.; always prompt. So much for the previous history, now for the present attack.

Last spring, it was noticed at the bank that he was not attending to his business with his marked promptness, but when pressed, would attend to matters as well and sharply as he ever could. He also says that he had the desire to put off anything that required any exertion of mind or body. Thinking that he might derive benefit from sea air, he went to the port of New York, and spent in the neighborhood of two weeks on a pilot boat, coming home very much refreshed, but soon dropped back into the same state of lethargy. It was also noticed that he was losing flesh, although not very rapidly. During June, while in the Ansable Chasm, he underwent great physical exertion, and noticed that he strained his back. On October 7th he came to my office, and put himself under my care; upon examination I found the following state of affairs:—

He informed me that for some few weeks he had difficulty about breathing when in a recumbent posture, but that a cloth saturated with camphor gave relief. Also when he ate too much that he would have to throw up a very little. Physical examination showed mitral obstruction and regurgitation. Liver healthy to all appearances. No pain in the kidneys upon pressure. Urine specific gravity, 1.006; passed normal quantity; no trouble to pass it; caused a little difficulty if he attempted to hold it too long; albumen about 1.24 by measurement in test tube; alkaline in reaction and showed no albumen until an excess of acid was added On the 11th he was taken with a severe headache and vomiting, and has so continued to the present time, some days passing without vomiting, then he will again vomit. The urine has contained albumen all of the time. We have not been able to find casts, and only once a trace of casts when there were some blood globules present. For the last three days of his life the breath had the peculiar uriniferous odor.

The muscular twitching was never marked. He had the full use of all his senses until about forty-eight hours before his death.

There seemed to be suppression of the urine at the last, as I introduced a catheter and could get no urine to flow. A post-mortem was not made. I hope that the history of this case may be of benefit to others, as it has been to me, and that I may get the opinion of readers as to what it could be. if not Bright's disease.

Glens Falls, N. Y. E. W. Hill, M.D.

Communicability of Syphilis by Suckling.

Ed. Med. and Surg. Reporter:—

Apropos of the above, in the case related in the *Giornale Italiano di Sonsina* (1880 p. 15), I would mention three cases of syphilitic infection, in which husband, wife, and lastly infant suckling son, two years of age, were respectively and in the order of sequence named, infected.

One year ago last March, Mr. A. called upon me for my opinion of a slight abrasion on the glans penis, which from its suspicious appearance, hardened base, indolent and insensative glandular swelling in the groin, I had no hesitation in pronouncing a true Hunterian chancre, or syphlitic lesion, and warned him accordingly, in regard to the danger to his innocent wife.

Nothing was said to me at that time about the child, two years of age and suckling.

The confrontation occurred about one month prior to this time. He was put at once upon hydrarg. prot. iod. from grains ¾–1 to 2, daily, after first applying a thick paste made of $S O_4 H_2$ and charcoal. The initial lesion kindly healed, and was followed by the secondary symptoms which I had promised him, to prove my diagnosis. I should say in passing that he was as fully satisfied and happy (?) as one could be under the trying circumstances. The symptoms in his case were all quite light, from first to last; some abraded mucous patches in the mouth from time to time, which readily yielded upon the application of *lapis infernalis*, and not enough papular and pustular eruption in the face to "give him away." Not so with his "better-half," her symptoms being very severe. Since I was not permitted to diagnose and treat my fair patient, only through stealth, I had to depend upon my proxy. I had him, from the necessities of the case, educated up to be a most admirable diagnostician. Her lesion was in the pudenda, followed by a very severe sore throat, high fever, supra orbital pains and copious eruption.

As soon as I learned the child was nursing, and could, without exciting suspicion, I had the child peremptorily ordered from the breast. The husband being keenly on the scent, and she confiding, I was enabled to satisfy myself that there were no local lesions on either breast, this being my only hope and promise to him of immunity from infection to his child. He made repeated, intelligent, and searching examinations of her breasts, and asked her if they were sore, but could not find out that such had been the case in the slightest degree.

The child was light and fair skinned as the father, and similarly lightly affected, but unmistakably syphilitic, the eruption being characteristic, with prodromatic symptoms. I might say that I was treating no less than seven cases at this time, in all their different stages and varying symptoms. I had frequent and unobstructed access to the child, calling the disease what I pleased, and examining it, not always in the

presence of its mother, and asked the husband to look for similar abrasions as his own, or a single sore about the mouth—but never one.

Query.—Was this disease communicated through the mother's milk (we have authority for this possibility), or some of the secretions of the body? J. D. LITTLEFIELD, M D.

Somerville, Mass.

Curious Reduction of an Old Luxation.

ED. MED. AND SURG. REPORTER:

I desire through your columns to report a case of luxation of humerus of four years' standing, and its unusual termination, which presents some novelty.

Mr. Chas. Palmer, a farmer, aged about 60 years, luxated his right humerus, the head of the bone resting in the axilla, on Thanksgiving morning, four years ago, by a fall upon the ice. Ineffectual efforts were made to reduce it, and the bone left in its unnatural position; he, as a consequence, having an almost useless arm, both on account of its immobility, and the great pain it caused him.

After a period of five or six months the case came to my notice, and after a careful examination, I advised that it should be allowed to remain and accommodate itself to its new position, since which time he has consulted with other practitioners, but always with the same advice. The case has gone on now for four years, without interference, the arm gaining a little day by day, in mobility; but he has never been able to touch his head or left shoulder, nor raise the point of the elbow more than eight inches from his side, any effort in that direction being attended with most intense pain. On Thanksgiving day last, he was leading a high-spirited blind horse behind his buggy; the horse ran against the wheel, and becoming frightened, sprang back with great force. Mr. Palmer had the leading strap wound round the wrist of the lame arm, which was drawn upward, backward and downward, with two-horse power; the horse before the buggy being counter extension, while the blind one was the extending power.

The power was applied upward and backward when the animal was in close proximity to the patient; downward and backward, when the full length of the strap was attained, and the power in front had bent the body forward on the seat. Mr. Palmer was most terribly hurt, so much so, that it was with difficulty he reached his home and bed. After a rest, the pain gradually subsided, and upon arising, judge of his surprise to find that the old stiff shoulder was stiff no more, but could be moved in every direction as freely as before it had received any injury, except for a less amount of tenderness than had been constant for four years. The case has progressed favorably since that time; the arm is growing daily stronger and more useful; the muscles of arm and shoulder had become considerably atrophied, but are rapidly regaining their former proportion. I report this case because it is an innovation upon the established theories, and because the facts in the case are so well established. I do not know that I should hitch two horses to a patient under similar circumstances, but it does open a way to a more thorough test of such cases than I have heretofore considered myself authorized to use.

La Moille, Ill. GEO. J. RICE, M.D.

An Amphibious Young Woman.

ED. MED. AND SURG. REPORTER:

I lay the following item before my professional brethren, as much for the sake of professional variety, as for that of information. Nevertheless, it may serve for a provoker of deductions:—

While practicing medicine near Mount Airy, Md., I was called to see Miss E. S., residing west of Clashtown, Pa., on the Chambersburg turnpike, near the foot of South Mountain.

I had previously been informed of the amphibious character of the case, by a lady from that neighborhood, who was sojourning at a friend's, near Mount Airy, and whom I happened to be attending at the time.

On my way to the patient's house, I called at the residence of Dr. John Carpenter, within two miles of the place, and invited him to visit the case with me. This I did because Dr. Carpenter was a man of sterling integrity, and, hence, I could feel confident of any statement he might testify to, as to so peculiar and strange a pathology.

We arrived a few minutes after our patient had left her bath, and while her nurse was arranging her hair and placing the bladder of ice on her head, which had ever to be there when she was on "dry land."

When I commenced my examination I found I should have little trouble, in consequence of her charming intelligence and conversational qualities. I found no organic lesion, and very little if any functional disturbance. The appetite and functions were good and regular.

On inspecting her bath fixtures, I found a pool of cold water in an adjoining room, fed by a spring at the foot of the mountain. And one feature of her idiosyncracy was that this pool must have ice in it the year round.

Upon inquiry as to the amphibious nature of the whole thing, I found that about nine years before she had been advised by a friend to bathe once a day, for some slight nervous trouble. She conceived the idea that twice a day might facilitate the cure, and so she went to thrice a day, and so on, till she had for six years been doing as I had found her. She had actually been going under the water about twenty to twenty-five times a day.

Here is her "modus operandi:" She would take four or five bathing spells a day, and would be *thrown* (not slid down quietly), into the water four to five times at each spell.

I must confess that the allowance which I had previously made for exaggeration and my incredulity, both vanished at the sight of facts, and Dr. Carpenter, their family physician for a number of years, said it could not well be exaggerated. He asked me how I accounted for it? I took my tobacco out of my pocket, and asked him how he accounted for my ability to chew that? "O! yes," replied the old gentleman, "I see, I see; force of habit, force of habit." He requested me to name the disease. I laughingly remarked that if he would allow me to

coin my terms I would do so. He agreed, and I called it a case of amphibio-nervo-psychological nonsense. He said he did not think my dictionary could be improved.

She was anxious to be cured. I drew heavily on her reasoning faculties, and finally convinced her that strategem alone could relieve her, and at once proposed my plan of treatment. She was much pleased and appeared to feel hope revive. Here was my method:—

Compose her to sleep awhile before the morning bath was demanded, and so continue to cheat her out of one bath the first week, two baths the second week, and so on, till done. She was delighted with the idea, and I proposed, as I resided about fifty miles away, that Dr. Carpenter superintend the treatment. This was satisfactory, and I left him to decide the sleep producer, only advising no preparation of opium. A brain and nerve food diet was also decided on, and the choice of that left to Dr. Carpenter.

I heard casually of her some time after, until I removed to the Mississippi Valley; and while there I heard she had got out of her amphibious mode of life, and was enjoying good health, though not very strong.

Now there is one thing that has occurred to me in connection with this case, and it is given only for what it is worth: as habit brought on this trouble, might we not bring habit to bear in curing many nervo-mental disorders?

P. J. Gardiner, M'D.

News and Miscellany.

Medicated Spectacles.

The Boston *Journal of Chemistry* observes that although a good deal has been said recently about "toughened" glass, the "toughest" story about glass appears in the advertising columns of a newspaper printed in a Southern city. Down there it seems that spectacles are made of "medicated glass," which has been analyzed by French, German, and American oculists, and pronounced to be "superior to any glass as yet made." Here are a few of the advantages of this vitreous marvel:—

"(1) The chemicals soften the light to the eye, completely doing away with that tiresome sensation that is usually experienced in using glasses after one or two hours' use.

"(2) The medicated properties contained in the glass make it as hard as a diamond. It will retain its polish, and never become dull or dim; hence you will always see through it as bright and clear as at first.

"(3) The chemicals keep the glasses cold as ice; result is, your optic nerves always cool, doing away with any feverish sensation to the eye."

What is quite as extraordinary, "granulated and sore eyelids" are "cured" by using the glasses. Whether they will enable the blind to see is not stated; but it would seem that but a slight "improvement" in the glass can be required to bring this about. That so transparent a humbug should thrive sufficiently to justify a "big" advertisement in a city daily is almost incredible; but the gullibility of the human race is apparently boundless.

A Good Suggestion.

Dr. L. Damainville, in a letter to the *Medical Record*, suggests that some one should, in the interests of medical science, gather into one volume—or a dozen volumes, if necessary—all the plans of treatment which would, beyond a question, have saved the life of our late President; including all the plans proposed by newspaper editors, medical men, and the thousand or more suggestions contained in letters written to the doctors while they were in attendance upon their distinguished patient. Who can estimate the value of such a contribution to medical science and to humanity?

Personal.

—Dr. George E. Walten, the well known author of "Mineral Springs of the United States and Canada," has located at Jacksonville, Fla., and will give his professional attention to any patients who may be recommended to his care.

—Several Louisville physicians are mentioned by name in a very effusive card in the Louisville *Courier-Journal*. The writer is a Methodist minister. Such a method of obtaining publicity is disagreeable to upright physicians, and a clergyman, at least, should not lend himself to it.

QUERIES AND REPLIES.

Boracic Acid.

Mr. Editor:—If you or any of the readers of your journal can inform me of the evil effects that would arise from the use of Boracic Acid as a preservative of meat, fish, etc., I will esteem it as a favor. E Foster, M.D.

Dr. B. P., of N. Y.—You will find the *mist. mirabilis* previously given in Queries and Replies.

Dr. S. K., of O.—We do not keep any books on sale, except our own publications. We are, however, at all times, willing to buy and mail you any works in the market. In such case, you should send us, with your order, the retail price of the book.

MARRIAGES.

CAMPBELL–LYON.—In the First Presbyterian Church in Williamsport, Pa., on Thanksgiving evening, November 24th, by Rev. S. E. Webster, Eugene B. Campbell, M.D., and Jennie Priestly, daughter of Dr. Lyon.

HERITAGE–CLARK.—On the 6th inst., at the M. E. Parsonage, Mantua, N. J, by the Rev. W. Williams Christine, Paul S. Heritage, M.D., and Miss Emma M. Clark, daughter of William W. Clark, all of Gloucester county, New Jersey.

HILL–BRUCE—December 7th, 1881, at St. Paul's Church, Brookline, Mass., by the Rev. R Kipp Storrs, Dr. John Marshall Hill, of this city, and Miss Louise Prentiss, daughter of the late Benjamin Bruce, of Brookline, Mass.

MOORE–KELLEY—In St. Johnsbury Centre, Vt., Nov. 22d, by Rev. J. Hammond, William M. Moore, M.D., of Lower Waterford, and Emma Kelley, of Johnsbury Centre.

RANSLEY–HOGG.—In this city, on the 7th inst., at the residence of the bride's mother, by the Rev. Hugh O. Gibbon, D.D., Dr. A. W. Ransley and Maggie A., daughter of the late Alexander Hogg, Esq.

DEATH.

WELCH.—In this city, on the morning of the 27th instant, Dr. John C. Welch, aged sixty-four years.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

GLACIAL ACETIC ACID IN NASAL HYPERTROPHY.

BY CHAS. E. SAJOUS, M.D.,

Chief Assistant, Laryngoscopic Department, Jefferson College Hospital.

Several eminent specialists having spoken in the highest terms of the merits of glacial acetic acid in the destruction of hypertrophied mucous membrane, and consequently of its value in hypertrophic nasal catarrh, I determined to take advantage of the numerous cases which have lately presented themselves at the clinic of Jefferson College Hospital, adding to them some of my private ones, to investigate its real value.

In the nasal cavity proper, chronic inflammation gives rise to a deposit in the deep layers of the membrane, of new connective tissue elements and an infiltration of these deep layers with new cells. At the same time, in the epithelial elements there is a morbid activity in cell growth, by which this layer becomes abnormally thickened and hypertrophied. Connective tissue is also abnormally developed by a slow process of proliferation, and having once become organized, remains a permanent element to deform the nasal cavities and interfere with their proper function. This tissue, being probably never absorbed, like the other cell elements of catarrh, furnishes, it seems to me, an explanation for the unsatisfactory results obtained in the treatment by astringents, their action being limited to the superficial mucous layer, and giving relief, therefore, only for a time. This is well exemplified in the better results obtained with this class of remedies in the treatment of chronic catarrhal inflammation of the pharyngeal tonsil, this being composed of an extensive agglomeration of follicles and glands, and almost entirely devoid of cellular tissue. In investigating the merits of glacial acetic acid in destroying the hypertrophied membrane, I have kept this point in view, and by dividing my treatment into two parts, one of destruction and one of induced absorption, the former directed to the hypertrophic tissue, which is generally limited to the two lower turbinated bones and to the septum, the latter to the vault of the pharynx, I obtained permanent results, which I could but seldom do, and that in exceptional cases, when using either class of remedies separately.

Glacial acetic acid has a great affinity for epithelial cells, and this suggested its use in hypertrophic thickenings of the mucous membrane, in which the epithelial layer plays an important part. Its action on cellular tissue is an indirect one if the applications are few in number, the tissue being then subjected to the pressure caused by cicatricial constriction; but direct, if these applications are renewed for a certain length of time, in proportion with the degree of hypertrophy. In this case, the epithelial layer becomes so thinned by destructive metamorphosis that the fluid penetrates into the cellular tissue itself and there keeps up its destructive action.

For its application, an instrument devised by Bosworth, of New York, is used—a flattened probe, bent at an angle of 150°. This is held in a universal handle, so that the bend of the instrument commences at about an inch from the end of the handle. This close proximity to the hand gives the operator a certain amount of steadiness, of great importance in the ultimate results. A

piece of cotton is wrapped around the flattened end, tightly if the quantity of acid to be held in its meshes is desired to be slight; loosely if the application is to be over a greater surface. It is dipped into the acid if both sides of the cavity are to be treated, that is, if there is septal hypertrophy besides the turbinate, and dropped on one side if it be limited to the latter. The vestibule being dilated and illuminated, the charged end is passed into the nasal cavity, following a line described by the free edge of the turbinated bone.

A burning sensation is the result, which will continue for some time, if not checked by the application of an alkaline solution. Dobell's I do not find to act as rapidly as a saturated one of bicarbonate of sodium, acetic acid requiring a very strong alkaline solution for its neutralization. If applied at once, no pain whatever will be experienced, and the acid application will be just as effective. During the day, a "stuffy" feeling in the nostril is experienced, which will sometimes go so far as to occlude the passage. This, however, only lasts a few hours, and in some patients does not occur at all. The next day, shreds of the destroyed mucous membrane are discharged, and a feeling of relief is at once experienced by the patient. This continues until all the cauterized tissue has been thrown off, leaving a groove to mark the seat of the exfoliation. This groove gradually fills up, not by the reproduction of tissues, but by a displacement, as it were, of the surrounding superficial stratum, which contracts, thereby constricting the parts beneath. This process requires for its completion about a week, and if the application is renewed on the same spot during that week, quite a serious inflammation is the result, which will cause the patient some suffering. The amount of tissue destroyed is, of course, in accordance with its density and with the amount of acid used, but, however great it may be, it is but slightly perceptible to the eye. This is to say that the action is slow, and that the applications must be repeated many times, if satisfactory results are to be obtained. The improvement is gradual and steady, and if care be taken to touch the same spot each time, in order to as much as possible avoid the destruction of what ciliated pavement epithelium may remain, not only will the stenosis be remedied, but the physiological action of the membrane proper will be preserved.

In the pharyngeal vault, when there is inflammation of the acinous glands, I have not found glacial acetic acid adaptable, giving rise to too much irritation. Here, astringent treatment, constituting that which I termed "induced absorption," will meet with success if properly applied. After the hypertrophic tissue along the turbinated bones has been reduced by the acid, I allow a couple of weeks to elapse without treatment, except a cleansing douche used night and morning. Then I either insufflate a powder, composed of iodoform and tannin, equal parts, or apply an ointment composed as follows:—

℞.	Morph. sulph.,		gr. iv	
	Acidi tannici,			
	Iodoform,	āā	ʒ ss	
	Ung. simpl.,		ʒ ss.	M.

These, of course, being applied after thorough cleansing, by alkaline douche.

Case 1.—A. H., aged 32, came to the clinic complaining of a hot, spicy feeling in the throat, accompanied by a constant "hemming" and muco-purulent expectoration. He did not complain of any nasal trouble, and I neglected, in the physical examination, to examine either the anterior or the posterior nares. I found the pharynx covered with inflamed follicles, considered the discharge as originating from the pharyngeal glands, and placed the patient under treatment for chronic follicular pharyngitis, applying actual cautery to the follicles, and prescribing alkaline sprays. After five weeks, the patient was discharged, the pharynx having returned to its normal appearance, and all symptoms having disappeared excepting the discharge, which had, however, greatly diminished. About a month later the patient returned, stating that he was as bad as ever, and that the discharge was greater than it had ever been. This time I did not neglect the nasal examination, and there found the source of the trouble. The pharyngeal gland was covered with a greenish white mucus, while the surface of the soft palate was in the same condition. Anteriorly, I found hypertrophy over the lower turbinates on both sides, with deflection of the septum to the left.

On the 14th of July, treatment by glacial acetic acid was begun, followed by insufflation of iodoform and tannin to the vault of the pharynx and upper surface of the soft palate. At the same time, and during the whole course of the treatment, I ordered the following solution to be applied with the douche:—

℞.	Acidi salicyl.,		ʒ ij	
	Sodii bibor.,		ʒ iij	
	Glycerine,		ʒ ss	
	Aquæ,	ad	ʒ vj.	M.

Sig.—Dessertspoonful in Oj lukewarm water, used by douche, night and morning.

Five weeks later the patient was discharged, cured. I met him a few days ago, and he told

me that he was as well as the day he was discharged.

Case 2.—Jenny A., aged 19, mill hand, came to the clinic complaining of difficulty in breathing through the nose, which forced her to keep her mouth open almost continually. This had begun about four years before, and her trouble was rapidly increasing. The discharge was merely mucus, but collected in lumps, which were "hacked" up into the mouth and expectorated. This forced oral breathing caused constant irritation in the throat, which gave her much trouble.

There being evidences of a scrofulous diathesis, I placed her under tonic doses of bichloride of mercury, with cinchona and carbonate of iron, and ordered the salicylic acid douche. The physical examination revealed hypertrophy of the middle turbinated on the left and of the inferior on the right. The glands being merely congested, the local treatment was limited to acetic acid, and after eight applications on each side, the patient was discharged, cured.

I can give twenty-three other cases treated in the same manner, with the best results. It seems that it not only destroys the hypertrophied tissues, but also checks the morbid activity of the deep layers. It is easy of application, causes no pain, if properly applied, does not cause too much destruction of tissue, is devoid of the danger of subsequent ulceration, as in other acids, and of that accompanying galvano-cautery, traumatic erysipelas.

1010 *Walnut Street.*

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

A SURGICAL CLINIC BY J. WILLISTON WRIGHT, M.D.,

Professor of Surgery in the University of the City of New York.

Philip W., thirty years of age, a carman by trade. A week ago last Monday he was cleaning a twenty-two calibre pistol, holding it in his left hand, the right hand in front of it with the middle finger over the mouth, when it suddenly went off. On examining his hand he found a small round opening situated at about the middle of the palmar surface of the middle finger. He was very sure that there was no opening through which the ball came out, and he supposes, therefore, that the ball is still in his finger. The patient states that two days after the receipt of the injury, while at the hospital, two incisions were made upon the finger, and the ball was probed for, but was not extracted. The back of the hand swelled, became red, and was very painful, and he lost his appetite and could not sleep. Two incisions were then made upon the back of the hand, and one upon the back of the finger, one of the former closing, and the other two discharging freely.

I suppose, therefore, from the man's statement, that he had an attack of erysipelas of the hand, in consequence of this injury, and the surgeon who had charge of it very properly supposed, from the feel of it, and from the general condition of the patient, the rapid manner in which the swelling extended, and so on, that he had to deal with a phlegmonous form of erysipelas, or possibly a cellular erysipelas under the skin, in which the skin was involved subsequently, and it was supposed these incisions were necessary in order to save tissue; that there was suppuration going on in the connective tissue, and by making these incisions matter would be let out, and in that way he would prevent extensive sloughing of the soft tissues. This was very proper, but after all, it would seem the ball was not found. No probing was made for the ball after the first time referred to.

You can see the incision, commencing at the opening which the surgeon made at the first examination, and around here the counter-opening. Through these openings little bundles of horse hair were inserted, as a drainage tube. These horse-hair drainage tubes, permit me to remark, are being used now very much in the treatment of suppurating wounds, for three reasons: in the first place, they are perfectly innoxious to the wound itself; in the second place, they give a good free drainage to matter; and in the third place, as the wound heals you can gradually withdraw one after another of the hairs, making the drainage material smaller and smaller as granulation takes place, until eventually you take out the last strand, when there is nothing but a little fine sinus or fistulous track left to heal up.

Later along, the back of the whole hand became very much swollen and red, and it was called erysipelas by the surgeon who had charge of it, and incisions were made, with the result before mentioned.

Now, I propose to put this man under ether, and make a careful examination, to see whether we can find the foreign body. I may say to you, in passing, that I believe that in all such injuries about the extremities, parts which are not particularly vital, I think the best time to find the ball is immediately after the injury. The patient after receiving such an injury should be put under an anæsthetic at once, while the parts are soft and diffuse inflammation has not occurred, and careful search should be made for the ball. Sometimes it is exceedingly difficult to find it after the present condition has taken place.

I may say, further, with regard to this man's history, that he came to my office a few days ago, and he seemed to be suffering a great deal of nervous irritation; he could scarcely bear to have his hand touched, or even looked at, and I obtained a statement from him that there had been during the last two or three days a little difficulty in opening his mouth; a little stiffness around the jaw, looking as though he had the commencement of trismus, but at that particular time none of those symptoms were present; he could open his mouth perfectly well as he can do now. Still, he tells me that since then he has been

troubled with a little stiffness about the jaw, and we may have, therefore, a slight degree of tetanus or trismus. It is just one of those injuries in which we are liable to get that condition, and for that reason, and also for the reason that he was suffering intensely, I put the patient at once upon support, gave him a liberal amount of nourishment, and put him upon anodynes and quinine. He had some fever. I gave him two ten-grain capsules of quinine, to be taken on succeeding nights, and one-third of a grain of morphine with a little hydrate of chloral, to be taken in sufficient quantity to relieve him of suffering. He tells me to-day, that since Saturday he has not suffered as much, although Sunday and Monday there was a good deal of pain.

In giving a patient ether, I presume you all understand the necessity for his coming to the operation with an empty stomach. You have all seen instances here, in which patients have come to the clinic with a full stomach, obliged to take ether, and you have noticed that they always vomit, and thus delay the operation. It takes a good deal longer to put them under the influence of the anæsthetic, and there is always a certain amount of danger, if there is solid material in the stomach, that some of it will be vomited up into the throat, and during inspiration fall back into the larynx and suffocate the patient. This patient has eaten nothing since breakfast.

In giving ether almost all patients complain of a sense of suffocation during the first few inspirations. This is generally relieved, if they will remember (as long as they can remember anything) when the sensation becomes intolerable, to cough. I suppose this sense of suffocation is due to the first effects of the ether upon the sensitive tissue about the fauces and larynx. After a few inspirations these parts become more or less insensible and the patient does not experience that disagreeable feeling. Etherization should be commenced rather slowly, not crowding it to the full extent at once, taking it off of the patient's mouth occasionally if he stops breathing, until that first condition has passed away. Then with most patients, especially those who breathe freely, there comes in a few moments a condition of anæsthesia, which is very temporary in its character. It sometimes comes within one or two minutes after the commencement of inhalation. It is what we call primary anæsthesia, and it continues just about long enough to enable you to open an abscess, or extract a tooth, or do some small operation of that kind without the patient knowing anything about it. In such small operations you should avail yourselves of this primary anæsthesia, because it saves the patient a great deal of that nausea or deadly sickness which follows complete anæsthesia. The patient will come out of this primary anæsthetic condition in a very short time, and will be able to walk out of your office and go home without assistance. On the contrary, if you do not take advantage of that period, you will have to carry him to full anæsthesia before you can do anything, and then the patient is utterly unable to do anything for a period of half an hour to one or two hours. He is in a state similar to that of a man intoxicated from alcohol, having no power over his legs, arms, or muscles, in any way.

Some gentleman asks the question whether the fact that a man is intemperate prejudices the case with regard to the operation? I answer, most undoubtedly, yes; that men who are intemperate in their habits not only bear certain injuries very badly, but they are just the kind of patients with whom we have so much trouble with that kind of delirium tremens in which we are apt to have high grades of surgical fever, and everything of that kind, and the same is true with regard to a surgical operation. The shock which is produced does not seem to be modified very much, whether the injury is received accidentally or whether it is made by an operation of the surgeon. Such patients always bear injuries very badly, and they are a troublesome class to get along with.

Here is another point to which I may call your attention in all such injuries, that after they have been violently inflamed and poulticed, as this one has, you will find the epithelial layer of the skin separated from the true skin in large masses, such as you see here, and there is always more or less pus accumulated, and it is very desirable to get such skin out of the way. It increases the fetor of the wound and helps to keep the parts in a very disagreeable, unwholesome condition. I am always in the habit, therefore, of pulling this skin off as far as it is detached, or of cutting it off with the scissors. You will notice that under this there has already been a little sloughing of the superficial layers of the skin.

The ball has splintered the finger and passed through to the other side, I believe, however, without involving the joint. It was a small one, with but little powder behind it, and it has, therefore, lodged under the skin, not passing entirely through. You will observe, that the periosteum is destroyed clear down to the metacarpophalangeal articulation, down to which point my probe passes through a sinus. As this is a very important finger we will not amputate it, but try to save it. It is in a condition, however, which in the old time would have been condemned at once as utterly impossible of repair, but it seems that the worst of the inflammatory action is over, and having removed one source of irritation, namely, the ball, it is quite possible that this bone may unite, and the denuded surface cover itself up again, and give the man a pretty useful finger.

There is another sinus extending along the back of the finger, which we will open. Then stuff these wounds full of finely picked lint, and put the hand up in a bandage for the present. First, however, washing the wound with carbolic acid and water, one to forty. The bandage should be so applied as to bring the separated surfaces close together, and the finger should be placed upon some little splint, to keep the parts in position, and give nature a chance to heal the fractured bone. If she does not effect a cure, then but one thing will remain to be done, namely, to make an amputation at the metacarpo phalangeal articulation.

Now, I believe that a good deal of this trouble would have been prevented if the patient had been put under an anæsthetic at the time he

received the injury, and time had been taken in making a thorough examination, for the ball lay just around on the back side of the bone, having crushed the bone and gone through: at the same time I could not appreciate it with the probe. I could feel a quantity of rough material there, but whether it was bone or lead I could not say, and I therefore enlarged the opening so that I could get my finger in and feel it. And, by the way, the finger is the best of all probes for all wounds. And I think it is frequently perfectly justifiable to enlarge the wound in almost any situation, except in the abdomen, etc., if the wound is to be probed, and introduce the finger and learn precisely just what has taken place. To give you an illustration of what I mean, let me refer to a case which occured while I was in the country, last summer. A young man was taking a Winchester rifle from under the seat on which he was sitting, in a boat, and in doing so struck the hammer against one of the ribs of the boat, and the gun exploded, the ball passing through the under and back part of the thigh, just in front of the gluteal fold, and I cut it out, here, just under the upper edge of the trochanter. There was a little hemorrhage, considerable shock, and at first it seemed as though the man had received simply a flesh wound, the ball passing behind the thigh bone and lodging under the skin. But I was not satisfied with that idea, and I therefore enlarged the openings after the man had sufficiently rallied from the shock, and then instead of probing with a common silver probe, or any other instrument, I passed one finger of either hand into each of the openings, and then found that although the external wounds were small, being made by a forty-four ball, there was a cavity all the way between which certainly seemed to me two inches in diameter, and it was full of pieces of broken bone, and of fragments of the man's drawers and pantaloons. My fingers met within the cavity of the hip-joint, and I found that the capsular ligament had been shot away, the edge of the acetabulum was torn off, and large pieces of bone were hanging there only attached by little bits of tendinous material, and the posterior half of the neck of the femur had been gouged out all the way from the round head down to the trochanter, so that although there was no solution of continuity in the length of the bone, yet there was a very severe injury involving the hip joint. Now, I never could have ascertained all that by simply introducing a probe, but with my finger I could feel everything, and know exactly what had taken place. I therefore recommend you, in all cases, when examining such wounds, especially those which are supposed to contain foreign bodies, to enlarge the opening and introduce your finger and make a proper examination.

A gentleman asks what are the indications of primary anæsthesia. When that period is reached you can open the eye and touch the conjunctiva without giving the patient pain.

Mrs. —, thirty years of age, married, has borne four children, the eldest nine years and the youngest sixteen months. About fifteen years ago she had a swelling under the arm, which she supposed was an abscess. Two months ago she had another swelling at about the same place, which disappeared, but has again reappeared, attaining this time to a much larger size—as large as a hen's egg, somewhat flattened out. It has a nodular, irregular feel, on the surface but it is not excessively hard. It causes her no pain, and is not tender to manipulation. There is no glandular enlargement under the other arm nor about the neck. There is no trouble with the breasts, and she says she never had any eruption of the skin, sore throat or sore mouth, or anything pointing to a syphilitic history. I should, therefore, be inclined to regard this simply as a mass of axillary glands, in a chronic state of enlargement or inflammation. I think the history points conclusively to that. There is nothing to account for it otherwise; nothing in the breasts, no corresponding enlargement of other glands on the opposite side or about the neck, no history of any specific disease that we can get at; and there is, on the other hand, the story of an old abscess there sixteen years ago, which was unquestionably a suppurating gland, and then in the early part of last summer some glands there, were swollen, which subsided, and subsequently the same condition which produced the first difficulty involved the other glands, and ten or a dozen, or more of them in a mass, have become swollen and in a state of chronic inflammation.

The treatment consists, in the first place, in trying what can be done by constitutional remedies and by local applications. Among the local applications the best are, probably, some of the preparations of mercury. Those which we use particularly at the present time for this purpose are the different strengths of the oleate of mercury, a preparation which looks precisely like olive oil. It is made in three different strengths, I believe; one about six per cent., another about twelve, and a third about eighteen. The medium one is that which is generally employed for this purpose, and also for the treatment of all glandular swellings, and in the treatment of specific disease. The eighteen per cent. preparation is rather too strong for extensive application; it is rather apt to produce the ordinary effects of mercurial inunction, that is, salivation, after a while.

I should give her internally a pretty long course of the iodide of potassium in moderate doses only, perhaps about three to five grains three times a day, combined with a thirty-second of a grain of the corrosive chloride of mercury, or corrosive sublimate, putting them into a solution of water, so that a teaspoonful would represent a dose. I would recommend you always to write corrosive chloride of mercury instead of bichloride, so that your druggist cannot make a mistake. If, after trying this treatment a reasonable length of time, there is no attempt at diminution in the size of this mass, the question will come up as to an operation, which, I think, could be easily performed, as the mass is freely movable, and does not seem to surround any important vessels I presume a straight incision on the surface of the tumor would enable one to split open the capsule of each one of the glands, and with the handle of the knife turn it out of its bed.

Medical Societies.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

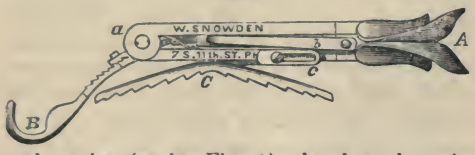
Stated meeting, held at the house of Dr. C. S. Turnbull, 1702 Chestnut street, on Friday evening, Nov. 25, 1881. The President, Dr. Cohen, in the chair.

Before the meeting was formally opened, Dr. Turnbull exhibited a case of chronic inflammation of the nasal mucous membrane and inflammatory occlusion of the Eustachian tubes, causing deafness.

Dr. Sajous exhibited a new instrument of which he gave the following description:—

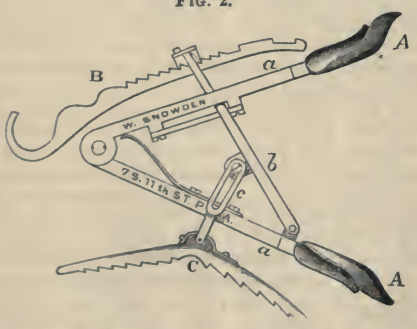
It combines three actions, and when in place does not require the use of either hand. The first of these actions is *the maintenance of the mouth in the opened state*, performed when the instrument having been placed closed in the

Fig. 1.



oral cavity (as in Fig. 1), the branches, A, separate at one end (as shown in Fig. 2), and

Fig. 2.



the grooved rests press against the upper and lower teeth. The separation of these branches, brought about by a double spring placed between them near their point of junction, causes the elevation of the arms, *b*, fixed at one end to the lower branch and attached at the other to the ends of an arched rod connecting the two upper branches, and which pass through a slot cut through each of these two upper branches. Being free in these slots, when the instrument is closed, the rod descends towards the posterior extremities of these branches, forced down, as it were, by the arms *b*, which revolve around their point of attachment just behind the dental rests. To the middle of this arched rod a pin is fixed, to which can be attached, at will, a palate hook, shaped as shown by letter B, (Figs. 1 and 2); this can be adjusted at any length, making it adaptable to any mouth. This then represents the second action, that of *elevating the soft palate*. The third action, *depressing the tongue*, is performed in the following manner: A curved bar connects the two lower branches, its ends passing and rotating freely in a hole punctured in the middle of each of these branches; to each protruding end is attached a small arm, *c*, perforated also with a longitudinal slot, and sliding freely on closing or opening the instrument, over a pin fastened to the centre of arm, *b*. The middle of this curved bar is adapted to a metallic heart-shaped plate, which is forced down when the instrument is opened, and maintains the tongue depressed.

Manipulation.—The instrument is entered closed into the mouth; the end of the palate hook is passed behind the uvula, and the grooved rests being placed between the jaws, the patient is directed to open his mouth to its full extent. The instrument opening at the same time, the soft palate is elevated by the flat hook B, the tongue is forced down by the depressor C, while the jaws are held apart by the horse-shoe shaped tooth-rests, A. The whole instrument can be locked in this position by a rack which engages the ends of the upper cross-bar, arresting its descent in the slots and preventing the approximation of the dental extremities of the instrument.

The advantages offered by it are evident: The hands are perfectly free and the different parts of the buccal cavity are held in such positions as will facilitate greatly the examination, while at the same time increasing the field. For the evulsion of post nasal tumors, or local applications in the posterior nares I have found it invaluable. The increased space behind the palate permitting the use of a large three fourths inch mirror, and enabling the eye to follow the point of whatever instrument is used in the naso-pharyngeal chamber.

Unfortunately, the reflex irritability of the soft palate often precludes the use of any instrument calculated to interfere with its functions. The moment it is touched, its muscles contract, (*levator veli, azygos uvulæ, etc.*), and its free border and that of the posterior arch adapt themselves closely against the pharyngeal wall, rendering a view absolutely impossible. For these cases, the palate elevator can only be used after having accustomed the parts to the presence of the hook—as the larynx is habituated to that of the forceps prior to the evulsion of tumors. Of course, this is only necessary when a prolonged view of the parts is required, as for the extraction of polypi, adjusting a snare wire, etc. If, however, an immediate view is absolutely necessary, a slight pull on the uvula with the fingers will paralyze the palatal muscles for a few moments, and the hook will be borne for that length of time without trouble.

Taking this reflex irritability in view, I made the elevator separable from the body of the instrument, and adjustable to it, while the gag and depressor are already in the mouth. If needed, it is held at the end of a pair of forceps, the hook is passed behind the velum, this is retracted, and the handle of the hook is attached to the pin in the centre of the upper crossbar. If it is not needed, the rest of the instrument will be found very useful as a tongue depressor and mouth gag, in ordinary rhinoscopic examinations and applications, and in all operations about the palate,

uvula and pharynx. The palate hook, independently of the rest, can be used in many post-nasal cases with great advantage, and in all troubles of the pharynx, when an extended view is necessary. C. SEILER, M.D., *Secretary*

EDITORIAL DEPARTMENT.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a pamphlet of twenty-two pages, Dr. Boardman Reed shows the advantages of Atlantic City as a winter health resort. It is a republication of the following papers: "The Climate of Atlantic City, and its effects on Pulmonary Diseases;" "What Atlantic City can do for Consumptives;" "The Sanitary Condition of our Seashore Health Resorts," and other papers, including a letter from Dr. William Pepper. It contains among other things full official reports, meteorological tables, etc., concerning the climate of Atlantic City.

——The introductory address delivered before the Class of the College of Physicians and Surgeons, of Baltimore, Sept. 14, 1881, by A. Friedewald, M.D., Professor of Diseases of the Eye and Ear, was a masterly depiction of the life and career his hearers had chosen for themselves. The address comes to us in pamphlet form.

——We have received, in the form of a reprint from the *Annals of Anatomy and Surgery*, a valuable paper on the Surgery of the Pericardium, by Dr. John B. Roberts, of Philadelphia.

BOOK NOTICES.

The Diagnosis and Treatment of Diseases of the Eye. By Henry W. Williams, A.M., M.D., Professor of Ophthalmology in Harvard University; Ophthalmic Surgeon to the City Hospital, Boston, etc., etc. Boston: Houghton, Mifflin and Company, 1881. Cloth, 8vo. pp. 464.

Encouraged by the favorable reception awarded to successive editions of his smaller work on diseases of the eye, the author has prepared a larger and more complete treatise, chiefly designed for the use of students and general practitioners. The book opens with a chapter on the method of examining the eye, a subject on which the author very appropriately bestows considerable attention. The general principles which should guide us in the treatment of ocular diseases are then briefly discussed. The avoidance of very active remedial agents forms the chief characteristic feature of Prof. Williams' therapeutic armamentarium. Acetate of lead he excludes from the list of ophthalmic remedies, and he cautions the inexperienced against the use of nitrate of silver. Several other remedies which have recently come into great favor with ophthalmic surgeons, such as boracic acid, hot water applications, etc., he makes no mention of. The chapter on traumatic injuries of the eye, and on affections of the various tissues of the eyeball are good. Each chapter opens with an anatomical description of the part under consideration, followed by concise but very accurate descriptions of the diseases by which they are invaded, together with such treatment as the author has found of most value. With regard to treatment, we think the author rather over-cautious in his warnings against potent remedies, such as nitrate of silver, for instance; yet, writing as he does for the general practitioner, if erring, it is better to err on the safe side; still we cannot help believing that many an eye has been destroyed by purulent ophthalmia, which would have been saved by the *early* use of this remedy before the cornea had become affected. In the treatment of glaucoma he regards surgical means as the only resource, and insists, we think very wisely, that iridectomy should be done promptly. Color-blindness receives full attention. This he regards as usually congenital and incurable; sometimes it is hereditary. Exceptionally, he says, it may appear as a symptom following disease of the optic nerve or brain, injuries to the head, serious illness, or the abuse of tobacco or alcohol. It very rarely affects females. He gives full directions for its detection. Considerable space is devoted to refraction and accommodation, errors or defects in the same and how to correct them, a subject with which every physician should be familiar. Separate chapters are devoted to diseases of the orbit; artificial eyes, how to choose them, and full directions for their insertion and removal; affections of the lachrymal organs and of the eyelids. The book is also provided with a set of test-types (Snellen's). The illustrations, including two colored plates, showing normal and pathological appearances of the fundus oculi, are all good, and the work is one which we can conscientiously recommend to the profession.

THE

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D. G. BRINTON, M.D., EDITOR.

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THOUGHTS ON THE PROGRESS OF MEDICAL KNOWLEDGE.

With this number we bring another year to the close. It has been one of unusual activity in medical science, culminating in the most important meeting of physicians and surgeons which the world has ever known, at the International Medical Congress in London, in August.

Whoever will compare the advances in our professional acquisitions during the last twenty years with any equal period antecedent, cannot resist the impression that sound scientific knowledge is advancing more rapidly—much more rapidly—now than in any previous age.

What, we would ask, is the reason for this? Are men more devoted, more enthusiastic, more earnest in the pursuit of knowledge than their predecessors? No one can maintain this. The records of hundreds of lives in previous centuries refute the suggestion. Is it, then, that our mental power is greater, that our facilities have so improved that we can grapple more successfully than our forefathers with the mysterious processes of nature, and wrest from them the secrets of their actions? We fear we cannot lay this flattering unction to our souls. There is no evidence that either in the individual or in the aggregate, man has increased in mental power in the last two or three thousand years.

Two facilities we have which our ancestors had not, and these two are sufficient to explain this progress.

We now understand the proper *methods* of interrogating nature. *A priori* theories of the universe have been dismissed; the authority of great names has been abrogated; the logic of induction has superseded that of deduction, and the corner stone of positive science has been laid in the grand axiom that every statement which claims belief must be verifiable. These are the principles which have swept away, as with a mighty besom, the cobwebs and antique dust which for so long obscured the human reason.

The second advantage we have above those who have gone before us in the paths of scientific research, is the extreme facility for intercommunication which we enjoy. Nothing like it could have been conceived as possible, even at the date of birth of men yet living. That the events of yesterday at the antipodes could be regularly chronicled in the morning paper, would have surpassed the dream of the wildest enthusiast of a century ago.

Let a man, now, in ever so obscure a corner of the world, announce, in a local paper of the smallest circulation, a discovery of real importance, and in a few days it will become the property of all the leading students and thinkers in that department of knowledge. All the world will know of it, so far as the world is interested in it.

This is but an ordinary and commonplace illustration of the power of *the press*, and the influence in the dissemination of knowledge which it exerts. It shows strongly what an immense agent for the advance of the race is the department of *periodical literature*, especially that of frequent issue.

In medical literature this is just as obvious as

elsewhere. We have often noted how a country physician, we will say, writing a letter to the REPORTER, containing some useful observation, or describing some typical case, would, in a few weeks, have his name reappear in a dozen journals printed in as many different countries, and almost in as many different languages. Whatever the merit of his discovery, of slight or of great moment, the tribute of credit was impartially and promptly awarded him by the universal and catholic church of science. So in return, through the pages of the REPORTER, he has speedily learned every marked improvement, every noteworthy discovery, every typical sign of progress in his profession, which has transpired in every country of the world.

These are the considerations which should impel every physician to take, read, and occasionally contribute to an active medical journal. If he neglects to do so, he is unjust to himself, he does not do his duty by his patients, and he does not merit the full respect of his profession. More than this, if he does all these, his duty is not properly accomplished unless he urges every one of his colleagues to the performance of the same, and sets forth to them the inestimable advantages to every practitioner to keep himself in constant contact, by this means, with the active intellects of his domain of knowledge.

SPECIAL REPORTS.

No. XX.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M.D.

(*Concluded from Vol.* XLV, *page* 724.)

H. KNAPP, M.D., reports (*Archiv. Ophthal.*, Vol. x, No. 1, p. 97), a fatal case of sclerotomy for hemorrhagic glaucoma. Recognizing the fact that hemorrhagic glaucoma is the most unmanageable form, and that iridectomy is almost useless for it, Dr. KNAPP tried sclerotomy, which was not only unsuccessful, but fatal.

The same authority (*loc. cit.*, p. 100) reports a case of

SUCCESSFUL REMOVAL OF A SMALL FOREIGN BODY IN THE POSTERIOR CORTEX OF THE LENS.

Dr. KNAPP removed the lens, and with it the foreign body, through a linear corneal section (with a Graefe's cataract knife), the extremities of which were near the corneal margin, and about 1 mm. above the horizontal meridian, whereas its apex was from 2 to 3 mm. below the upper corneal margin. No iridectomy was made. Eserine was at first used, subsequently atropine. One month later V. was $\frac{20}{30}$, and the pupil was round, central and perfectly clear. Dr. KNAPP says the operative procedure appeared safe and to be recommended for similar occasions. The foreign body was a minute metallic body, 1 mm. long. The lens substance surrounding it was stained with rust.

In his abstract of *Am. Opthal. Literature* for the last quarter of the year 1880, Dr. SWAN M. BURNETT, of Washington (*loc. cit.*, p. 103), reports the following:—

Dr. MICHEL. *Effect of Quinine on Sight and Hearing.*—At a meeting of the St. Louis Medico-Chirurgical Society, (St. Louis *Courier of Medicine*, Nov. 1880), Dr. MICHEL reported the case of a man 38 years of age, who, suffering from intermittent fever, took *seven drachms of quinine* in the course of twelve hours. Soon after he became suddenly blind. This was six months ago, and he was still blind. O. S. showed the nerve to be pale, veins thread-like, and arteries almost bloodless and scarcely perceptible.

Dr. BAUMGARTEN, reported a case of a boy who lost sight and hearing after taking what was estimated as *five drachms* of quinine. He recovered in about six weeks.

D. S. REYNOLDS. *Contusion of eyeball* by a shot, the shot remaining in the retro-tarsal fold for nearly a month. 2. A boy had his *eye* "*gouged out*" in a fight. Retina was severed from the disk, but none of the vessels were ruptured. 3. Complete *detachment of the retina* caused *by a blow* from a fan. 4. A *low degree of astigmatism* $\frac{1}{12}$ corrected with complete relief to asthenopic symptoms (N. Y. *Medical Record*, Dec. 4).

E. C. MANN. *On the treatment of blindness and deafness resulting from cerebro-spinal meningitis* by the constant current of electricity (*Medical Gazette*, Dec. 4). Dr. MANN reports that he has obtained somewhat remarkable results from the use of the *constant current* in conjunction with hypodermic injection of nitrate of *strychnia* in such cases.

D. WEBSTER. *Amblyopia from abuse of tobacco and alcohol* (N. Y. *Medical Record*, Dec. 11). WEBSTER formulates his conclusions from an examination of twenty cases, as follows:—

1. Amblyopia from poisoning by alcohol alone, or by alcohol and tobacco combined, is not uncommon.

2. Amblyopia from poisoning by tobacco alone *does occur*, but in this country somewhat rarely.

3. Cases of amblyopia from abuse of tobacco and alcohol will usually improve, perhaps to a limited extent, on simple abstinence from the poisons causing the disease.

4. They will improve much more rapidly, under treatment by hypodermic injections of strychnia, this drug having a specific stimulating influence on the nervous portion of the visual apparatus.

B. J. Jeffries. *Removal of a piece of iron from the eye by the electro-magnet* (Boston *Medical and Surgical Journal*, Dec. 30).

C. H. Williams. Notes of changes seen in the *eyes* of ten cases of *general paralysis of the insane* (Boston *Medical and Surgical Journal*, Jan. 13). The commonest symptoms were small pupils, with slow and poor reaction to light. In four cases no changes were noted in the fundus. In four cases there were slight signs of atrophy of the disk. In two cases of short duration there were slight evidences of congestion about the disks.

H. W. Williams. *Continued toleration of foreign bodies within the eyeball* for fifteen and twenty-two years (Boston *Medical and Surgical Journal*, Jan. 27, 1881). Two cases were given.

Dr. Oppenheimer. *Foreign body* in the Eye. *Removal by a Magnet.* In the case reported above by Jeffries, the foreign body was removed through a corneal, and in Oppenheimer's case, through a scleral (near rectus internus), section. Gruening's magnet was used in this case. V. $\frac{20}{200}$.

The Report of Progress of Ophthalmology for the first half of 1880, by H. Magnus, of Breslau, and A. Nieden, of Bochum, translated by Dr. R. O. Born (*Archiv. Ophthalmol.*, vol. x, No. 1, p. 108). Galezowski observed *irideremia* in one family, through several generations (*Clinique Ophthal.*, R. d'O, 1880).

Magnus. *Defect of lower lachrymal puncta* on both sides, C. f. A., *congenital.*

Schneller. *The nutrition of the retina* (A. f. O., vol. xxvi, 1). The retinal vessels nourish sufficiently the layers of nerve fibres, ganglion cells, and the nervous elements of the inner granular layer; they can also supply both layers of granules and keep in a condition of *vita minima* for a limited period, the layer of rods and cones. The vessels of the chorio-capillary layer supply the pigment layer, rods and cones, outer limiting membrane, and the layer of outer granules.

Zehender. Attempt at *transplantation of a piece of cornea of a dog into the human cornea* (Z. M., p. 189). The enucleation, four days later, showed the healing had not yet taken place.

Schliephake. The effect of *muscarine* on the human eye. It causes an intense spasm of the ciliary muscle, and irritates the conjunctiva less than extract of calabar and physostigmine (*Mittheil. aus d' Ophth. Klinik in Tübingen, Heft* 1, 1880).

Preyer. *Psychogenisis* (*Deutsche Rundschau*, May, 1880). The development of the sense of vision, pp. 213–216. The symmetry of the movements of the eye is not congenital, but is gradually acquired; at first, the movements are asymmetric. Before the third year the color sense is not fully developed; blue is the last color which is designated correctly. At first the visual field is composed only of indistinct light and dark spaces, and only the intensity of light is appreciated. Toward the end of the first month the child begins to fix its gaze and to accommodate.

Berger. Hypnotic conditions and how they are brought about (*Breslauer, Aerzth, Zeitschr.*, 1880, Nos. 10–12). It is stated that *color blindness is temporarily cured*, not only *by warmth* applied to the eye, but also by intense irritation of the skin, *as pinching of the skin, cutaneous faradization*, etc.

H. Cohn. The *disappearance of color blindness after warming the eye* (*Deutsche Med. Wochenschr.*, No. 16). Three distinctly color blind persons are said to have lost their color blindness for a moment by warming the eye.

Jeffries. Report of the *examination of* 27,927 *school children for color blindness* (*School Document*, No. 11, of Boston, 1880). 608 *male children were color blind*, = 4.202 per cent., *and* 9 *females*, = 0.006 per cent. He recommends Magnus' system for the education of the color sense.

Strasser. Contributions to the use of *disinfectants in ophthalmology* (*Inaug. Dissert. Beme.*). After experiments upon animals, the following preparations only seem to be adapted to ophthalmic practice: a 4 per cent. solution of boracic acid, a 5 per cent. solution of benzoate of soda and chlorine water.

Gatti observed *amaurosis* after the use of *salicylate of soda* (*Gaz. degli. Ospital.*, Vol. i, 4).

Agnew and Webster. The alleged *cure of cataract by electricity.* The statements of Neftel were not confirmed by the later examination of the patient (*Med. Record*, Vol. xvii, No. 20).

"Churchman." The editor of the *Churchman* (a religious paper), claims, in a letter to the editor of the *Medical Record*, his right to make further

publications upon the astonishing results of treatment of cataract by electricity (*Medical Record*, Vol. xvii, No. 13). The reviewer begs leave to call attention to the fact, that in the first third of this century there was a great excitement over the cure of cataract by electricity, but without any foundation. Compare MAGNUS "Geschichte des grauen Staares," Leipzig, 1876.

KNAPP, *Neftel's alleged Cures of Cataract by Electricity*, (*Medical Record*, Vol. xvii, No. 24). The patient was neither cured nor even benefited, but had become near-sighted. The so-called "second-sight" of old people almost always indicates cataract.

FRANKEL. *Removal of a piece of iron from the vitreous chamber by a scleral section and the magnet. C. H. A.*, p. 37.

JONES. Mentions *an operation for cataract by discission from behind. Lancet*, No. 25.

O. E. DE FONTENAY, Copenhagen, concludes as the result of examinations for color blindness in Denmark.

1. The number of color blind is 2.25 per cent. (both sexes together).
2. Color blindness more common among men.
3. It is more common among the lower classes.
4. It is equally distributed over the whole country.
5. Red blindness is more common than green.
6. The defect exists always in both eyes.
7. The color of the eye has no effect.

It must be finally said that the more numerous the examinations, the smaller the per cent. found. (*Archiv, Ophthal.*, Vol. x, No. 1, p. 18.)

HOLMGREN (*loc. cit.* p. 17) in 1877 published his results as to *heredity in color blindness*. His experience was large, and he deduces the following:—

1. Color blindness is hereditary, and attached to certain families.
2. It may not be found in one generation, to reappear in the next.
3. All the children will not be affected, the girls especially escaping.
4. When several children are affected, it is traceable to the mother.
5. The kind and degree will be the same for all the cases in the family.

Dr. SWAN M. BURNETT, of Washington, D. C., in an excellent article (*Archiv. Ophthal.* Vol. x, No. 1, p. 1) entitled "Color Perception and Color Blindness," commences by saying, "A theory of color perception, in order to be acceptable, should account consistently, and in a satisfactory manner, for all the phenomena of colored vision and color blindness. I take it to be a generally conceded fact, that neither of the two at present prominent hypotheses, do this." He then goes on to say, "We are fully justified, I think, in assuming that the true theory of colors, when found, will be simple, and that it will conform to the known and demonstrated laws governing the action of light on simple bodies, and in our opinion it will be found to lie in the direction pointed out by recent experiments on the action of light on the molecular condition of certain substances, and, moreover, we believe, quite contrary to the present accepted opinion, that *variation in sensation will have its basis, not in complexity of tissue, but in the varying action of the affecting agent.*"

CORRESPONDENCE.

Questions on Vaccination.

ED. MED. AND SURG. REPORTER:—

Referring to the discussion on vaccination in your journal:—

1. *I know* that some persons are *temporarily insusceptible* to the effects of vaccine virus. One case, among many in my practice, is this: I was called to a man whom I found with the symptoms of malignant smallpox. I asked him why he had not attended to vaccination? He noticed the tone of fault finding in my voice, and said, "You cannot blame me, Doctor, for I have been vaccinated twenty-two times, and you have vaccinated me three times yourself." He died in three or four days. There can be no doubt that *he had been insusceptible* to the effects of vaccination; but I have no doubt that if he had been vaccinated within a short period before he was exposed to smallpox, the vaccination would have taken effect and his life would have been saved. My records of 26,399 vaccinations, to this date, show many scores, I think hundreds, of cases, where children were vaccinated with perfect success, who had been unsuccessfully vaccinated previously, from one to fifteen times. It is probable that a considerable number of these had been temporarily insusceptible to the effects of vaccination, though in the greater portion of the cases the failure was the fault of the vaccination.

2. Another case may have some bearing upon another point discussed by your correspondents:

A child was born of a woman sick with modified smallpox or varioloid. The case was severe, the eruption was profuse, and the child was born on the fourth day of the eruption. I vaccinated the child when it was just twenty-four hours old, and at the same time another child about two years old, who had never been vaccinated. The vaccination produced a perfectly typical result in both children; they both remained in the room with their mother, and in the adjoining room, and neither of them had the slightest symptoms of smallpox. The tenement had only two rooms. The disease in the mother had not protected the

child from the effects of vaccination. Want of time prevents me from inflicting a much longer story of experience upon you. E. M. S.

Providence, December 17th, 1881.

News and Miscellany.

OBITUARIES.

DR. I. I. HAYES.

In New York city, Dec. 17th, Dr. Hayes, the well-known Arctic explorer, died suddenly, of heart disease.

Dr. Hayes was born in Chester county, Pennsylvania, March 5th, 1832. He was sent to the University of Pennsylvania, from which he was graduated in 1853. Before his graduation he had applied to Dr. Kane for permission to join in the second expedition to the Arctic, and secured the appointment as surgeon of the expedition. He landed in New York from this expedition October 12th, 1855, after an absence of two years, four months and thirteen days. Upon the return of Dr. Kane's expedition, Dr. Hayes announced his conviction that, notwithstanding the failure to reach it, an open Polar sea did exist, and he set about raising the money to organize an expedition to discover it. In December, 1857, he presented his views to the American Geographical and Statistical Society, and during the succeeding winter he lectured throughout the country and at the Smithsonian Institute in Washington. In 1860 the schooner United States, of 133 tons, was fitted out, and Dr. Hayes placed in command. He sailed from Boston with a party of fourteen men, on July 10, 1860, and reached Boston on his return October 23, 1861. The chief results attained by the expedition were the completion of the survey of Smith Sound, the discovery of a new sound or channel, opening westward from the centre of Smith Sound, the determination of the magnetic dip and declination at many points within the Arctic circle, surveys of glaciers by means of which the rate of their movement is determined, and pendulum experiments. Upon his return home Dr. Hayes found the war in progress, and he at once volunteered as a surgeon in the Union army, and served in that capacity until the close of the war. Upon retiring from the service he devoted himself to the preparation of a history of his voyage to the North. This was published in Boston, in 1867, under the title of "The Open Polar Sea," and was followed in 1868 by another volume describing some of the more thrilling incidents of the expedition, entitled "Cast Away in the Cold." Upon the appearance of his first book he was presented with a gold medal by the Royal Geographical Society of London, and in 1868 he received another from the Geographical Society of Paris. His ardor for Polar expeditions had not weakened, but he was unable to organize another exploring party to the North Pole, and in 1869 he started on a trip to Greenland, with William Bradford, the artist, in the steam yacht Panther. The story of this voyage, with the scientific facts gathered by the Doctor, are preserved in "The Land of Desolation," published in New York, which Dr. Hayes had decided on making his home in 1872. This was the last extensive travel in which the Dr. engaged. In the last few years he took an active part in politics. Dr. Hayes never married.

QUERIES AND REPLIES.

Physiology.

Mr. Editor:—Is there any other way *known* by which living matter germs can set up in other living matter germs the process of *cell formation*, than by fertilization? What is the physiological prototype for the pathological formation of cells?

2. Upon the supposition that a specific disease is set up by a foreign organism, why cannot the same disease be again *always* set up by the same organism—how is immunity given?

3. If there is a germ external to the organism, by which specific diseases are produced, why do many escape? Is there any known or alleged principle by which many resist the disease—the germ? A. L. C.

We leave the above for some of our readers to answer, and shall be glad to publish their replies.

Dr. C. E. Q., of Penna.—Dr. Wm. Goodell.

MARRIAGES.

BRONSON—HOTCHKISS.—On Monday, Dec. 12th, in St. Ann's Church, West 18th St., by the Rev. George C. Athole, Jno. O. Bronson, M.D., of New York, and Martha P. Hotchkiss, of New Haven, Conn.

DIXON—DUNTON.—At the residence of the bride's parents, Brooklyn, N. Y., on Tuesday evening, Dec. 13th, 1881, by the Rev. Thomas B. McLeod, Dr. George A. Dixon and Sarah Pearl, daughter of William C. Dunton.

MARTIN—POTTS.—On Tuesday, December 13th, in the Cohocksink Presbyterian Church, this city, by the Pastor, Rev. William Greenough, Mr. Joseph Martin, M.D., and Miss Sallie Potts, both of this city.

WEBB—WHEDON.—At the residence of W. W. Whedon, Ann Arbor, Mich., Nov. 30th, by the Rev. J. Alabaster, D.D., Wm. J. Webb, M.D., of Lowell, Mich., and Miss Nellie M. Whedon.

DEATH.

BRICKEL.—Dr. D. Warren Brickel, a prominent physician of New Orleans, died December 11th, at the age of 51 years.

CURTISS.—Dr. Thomas S. Curtiss, a well known surgeon at the Massachusetts General Hospital, in Boston, died suddenly, December 11th, at the age of 40 years. He was graduated at Harvard and in Paris, and was a member of many medical societies at home and abroad.

DONALDSON.—In St. Johnsbury, Vt., Nov. 28th, Dr. W. A. Donaldson, aged 33 years.

FORSTER.—Near Georgetown, S. C., July 29th, 1879, Alexius Mador Forster, M.D., in the 64th year of his age.

At the same place, Oct., 30th, 1881, Alexius Mador Forster, Jr., M.D., aged 34, second and eldest surviving son of the former.

GRIMES.—Dr. Thomas W. Grimes, 60 years old, a prominent physician of Columbus, Ga., died suddenly, of heart disease, while sitting in a chair, December 12th

RODGERS.—In Norwalk, Fla., on Nov. 30th, George M. Rodgers, M.D., son of the late J. Kearney Rodgers, M.D., of this city.

STILLMAN.—Chas. H. Stillman, M.D., of Plainfield, N. J., on Sunday, December 11th.

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